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# IQLR.....

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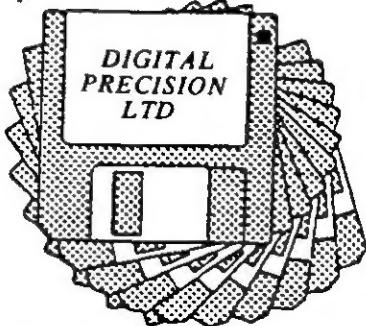
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# CONQUEROR GOLD S/E

London, GREAT BRITAIN - Mark Knight

## A quick declaration:

*Some QL users will know that I am a fairly prolific QL programmer, and some of those will know that Digital Precision have published some of the programs that I have written. PC Conqueror Gold Special Edition is well beyond my programming abilities, and I have had nothing to do with its development, distribution or sales. I am simply a user of this program, and I do my best to be honest in this review. Digital Precision did allow me access to their hardware and software when I reviewed the program for QL World, and much of the information that I obtained is reproduced here. As QL World retain copyright of that article, I have started the text from scratch for IQLR, and without deadline pressures I should do a better job of the writing.*



*As the program name, PC Conqueror Gold Special Edition, is a bit long winded, I will abbreviate it to "the emulator" or just "Conqueror" throughout the review.*

## First impressions:

I came to the Gold Special Edition of PC Conqueror after using the older PC Conqueror for some time, mainly for editing and compiling of programs written in Turbo Pascal. I had used the original emulator for some time, and the new PC Conqueror ran the PC software I had. I looked closely to see the advantages of the latest release. These advantages did, however, prove to be substantial when testing had progressed.

The first thing that was obvious was snappier screen updating, not perhaps noticeable in text mode, but plainly an advantage when running programs in CGA graphics modes. Digital Precision also claim that the emulator is much more compatible than any previous PC emulator for the QL, and in fact this proved to be the case, as the new PC conqueror ran some very awkward protected software that defeated both Solution and the old PC Conqueror. Most of the PC software that I have demands no more than PC text only modes, and so will run just as easily as it would on a PC.

## Important changes:

The new emulator has, as stated, been made much more compatible than previous emulators, and usually if a piece of software will not run it is because it uses a screen mode that the current QL hardware cannot support. Conqueror will even run software demanding 640x200 pixel CGA graphics, on a standard QL screen with 512x256 pixels available. The program achieves this apparent impossibility by using an intelligent shrink routine, and with the vast majority of such programs this works very well.

If or when higher resolution screen modes become available from the QL, (Miracle Systems graphics card?) Digital Precision have already built the hooks into PC Conqueror to quickly allow new graphic mode drivers to be added. This could allow EGA and even VGA graphics to be supported.

## CONQUEROR GOLD S/E - (CONT'D)

The biggest change from previous emulators is the one designed to take advantage of the extra memory of Gold Cards, Atari ST QL emulators and THORs, and that is support for IBM PC Expanded memory systems. This allows PC Conqueror Gold SE to run both programs requiring Expanded memory and Extended memory. Expanded memory and Extended memory on the IBM PC are not the same thing, and please believe me, as I have said before, you don't want to know the details unless you have to.

Another very important change is support for both HD and ED floppy disk drives, allowing PC High Density disks to be used seamlessly, and also allowing an ED disk to be used as if it were a small hard disk. Previously, the QL could use disk drives up to a maximum of 720k, so PC Conqueror could only support the 160k, 180k, 320k, 360k and 720k floppy formats from the PC world, but can now support 1.44Mb floppy disks as well. Users could configure part of a QL hard disk as a Conqueror PC hard disk, or produce a "pretend" hard disk on a floppy drive, ramdisk, or, if they really wanted to drive themselves crazy, even on a microdrive cartridge!

The new Miracle Systems ED disk drives allow 3.2Mb of data to be stored, and PC Conqueror Gold SE will make pseudo hard disks on these as easily as on any other storage medium. Unlike real hard disks, these are easy to back up, simply copy the configured file to another floppy, using the QL COPY or WCOPY commands.

### A Note about memory:

Before going on to detail some experiences of software use, I will mention something that can puzzle some people, and may cause memory or speed problems when using PC Conqueror. Many PC programs exist for managing the PC memory, and squeezing the last byte from MS-DOS or DR-DOS. The PC memory map has various areas, Conventional memory, High memory, Upper memory, Extended memory and Expanded memory etc, and managing all of these can be a nightmare for a PC user trying to run large applications.

Because the QL and its compatibles have a simpler memory map, and use Motorola 68000 series processors, the RAM in a QDOS system is much easier for programmers to manage than that in an IBM compatible machine. Digital Precision took advantage of this to write memory management into PC Conqueror that is much better than that which can be achieved in a real PC, and without the speed and compatibility problems of a real PC memory optimiser. Loading a PC memory manager will therefore, waste memory.

Digital Precision, to my mind, do not make this feature clear in the manual or in their advertising (though Freddy Vachha, the Digital Precision boss, will be happy to tell you this, and many other things at great length, given half a chance). All of this means that you should avoid PC memory managers when using Conqueror Gold SE, as the program is able to do far better than any of them without help. This is a fact, not a piece of advertising hyperbole, and is partly due to the careful design of PC Conqueror Gold SE, and partly due to excellent QDOS memory management.

### In use:

The most important thing I can say is, in many ways, the thing that users should be able to take for granted. I have tried a lot of PC software with the emulator, and all but two programs ran perfectly.

## CONQUEROR GOLD S/E - (CONT'D)

One of those that did not run needs an advanced PC graphics card, but uses an auto detection routine to assess the graphics hardware available, then reports with an error message in text mode if it isn't able to run.

I tried this program, knowing it wouldn't run, simply to see if the emulator would permit the very hardware-dependent auto detect routines to work properly, and if the correct error message would appear; it did. The other program that wouldn't run under PC Conqueror will not run on some PC compatible computers either, and my own conclusion is that it probably has some very fussy, hardware dependent code in it, and this means it might be regarded as badly written anyway.

Using the new emulator with a Gold Card, some QL users will gain a special advantage, as many Gold Cards can be switched from the usual 16Mhz clock rate up to 24Mhz. On some QLs this will crash the system immediately, as they simply can't cope, but if your QL can cope PC Conqueror Gold SE will work at the higher clock rate happily. My own QL will not work at the high rate, but I did borrow one for the review period that worked faultlessly at the higher clock rate, and I used it for all testing. I had no hint of trouble with the speedy combination of QL and 24Mhz Gold Card, so can recommend to serious users with the spare cash that they do their best to obtain a QL that will work at the higher speed, if they have a switchable Gold Card.

The approach to using the higher clock rate is more sophisticated than simply using the POKE command that normally switches the Gold Card to the faster rate. Conqueror Gold SE will switch the clock rate down for many operations to increase reliability, and for all operations, like reading from and writing to disk, where the clock rate makes little or no difference anyway. This approach runs the Gold Card at its normal clock rate much of the time, which means it runs cooler, and is therefore more likely to be safe and reliable.

In discussions with Digital Precision I discovered another feature of the new PC Conqueror that certainly shows forward thinking, and although it will have little or no effect on a QL, it may have a substantial effect on some QL compatibles or emulators. The code of Gold SE is very linear in places, and avoids many subroutine calls and jumps. This has the effect, on 68030 and 68040 processors, of making best use of the processor caches and pipelines that these chips have, by not constantly jumping to code outside the cache or pipeline.

Those with an Atari 68030 QL emulator board from Jochen Merz can benefit right now, and when the QXL card with its EC version of the 68040 is ready, many more users may take advantage of this. For those with no knowledge of what this all means, the way Gold SE is written will take better advantage of new hardware than other QL programs. Suppose most QL software running on a QXL card is twenty times faster than a basic QL; you might expect PC Conqueror Gold Special Edition to be twenty five times faster than it would be if you could run it on such a QL.

Please note that the precise figures given here are guesswork, I only use these numbers as an illustration of the effect: The actual numbers are likely to be higher if you obtain a real QXL card.

## CONQUEROR GOLD S/E - (CONT'D)

### Benchmarks:

The subject of benchmarks is a prickly one, since they usually test systems in a most unrealistic way, giving results either too favourable or too critical. The most realistic benchmarking is done using the actual programs that users will run, so most of the speed testing I did was done this way.

The above notwithstanding, some benchmarks are worthwhile. The old PC Conqueror was exhaustively benchmarked in the May 1990 issue of QL World, and the reviewer came to a conclusion that I have summarised as follows: The program was very compatible, adequately fast (about half the speed of a real original IBM PC, i.e. 4.77Mhz 8088), and was highly recommended. The real question for me was, is the new version worth \$50 more?

During testing I had access to one of the fastest PCs that money can buy, with an 80486 DX2 processor running at 66Mhz, fitted with vast amounts of RAM and 13ms cached hard disks adding up to several Gigabytes. The comparisons with this system were certainly not fair on PC Conqueror (think of the price difference alone), but Conqueror did spring some surprises that would horrify PC fans. To help your judgements, I should also mention that I was using Lightning SE, too, as it is now almost a reflex with me to install this package on my QL boot-up disks.

Norton Utilities v4.5 Speed Index revealed that the new Conqueror, running on the fast Gold Card system, was about eight times faster than the old version, running without the Gold Card. The fast Gold Card alone would be around five times faster, so eight times shows a considerable improvement. The Norton Disk Index test is designed to test hard disks for speed, and using it under Conqueror on a pair of Miracle Systems ED disk drives gave a stunning disk index of 9.6. The real PC, described above, read 7.6 on one hard disk and 9.2 on the other, both, you will note, slower than Conqueror was when pretending to have a hard disk using the ED floppy drive.

Part of this stunning result is due to QDOS and its built-in cache routines, part due to the very high speed of Miracle's ED disk drives, and part due to the carefully written Conqueror hard disk emulation. This disk benchmark clearly reflects real performance, as the boot-up test and the Sage accounts program later showed.

Using the Landmark v2 test program, results seemed favourable but odd, varying wildly as Conqueror's settings for job priorities were tuned. I doubt that Conqueror will give such varying speeds when used with real-world applications, but it was amusing to see, with speeds varying from about one half the speed of an old PC-XT, to ten times faster!

When the QXL card is fully developed I would expect PC Conqueror to be faster than many real 80286 (maybe even 80386) PC compatibles, so that some users might be better off running Conqueror than using their real PC. The 68040 (even the 68EC040 version used in the QXL) is shockingly fast, running at about the speed of an equivalent 80486 at double the clock rate. This means that the 20Mhz chip used in the QXL card runs at about the speed of a 40Mhz 80486sx (which is itself twice as fast as the mainframe I used to work with).

## CONQUEROR GOLD S/E - (CONT'D)

After looking at formal benchmarks, I started to use some real programs, and the figures from these are a much better guide. To boot up MS-DOS using Conqueror Gold SE on the Gold Card from ED disk (compressed or not) with a trimmed down AUTOEXEC.BAT and CONFIG.SYS took under seven seconds. To boot up its predecessor on my old QL system to 90 seconds or so. On the real PC it took over thirty seconds to boot from a standard 720k floppy with identical system files, and to boot from the fast hard disk was only one or two seconds faster than Conqueror. To my amazement, the program seems to be faster than Digital Precision claim in the area of disk access.

PKArc, a famous shareware file compression and archiving utility for the PC, was actually faster than the QL port of the same program, (QL ARC), running on the same Gold Card QL. This program would have been perfectly usable had it been running at a quarter of the speed. NewWord, a Wordstar clone, was quick and efficient, some menus not appearing too smartly, but still impressive overall.

Turbo Pascal compiled extremely quickly, my only complaint being that the pop-up menus could have popped a bit quicker, which reminded me of the NewWord experience. The Pascal source code I have is all my own work, and of dubious quality, but the text-mode game that I tested most thoroughly ran at a playable speed (and was better than my memories of it). Emulated Quickbasic, though not exhaustively tested, seemed to run about four times slower than SuperBASIC, not bad considering the circumstances. Compiled Quickbasic was much faster, about five or ten times faster than the native SuperBASIC interpreter.

After all this testing, I then tried MChess, an American PC chess program that is about the best that can be obtained for the PC, and possibly the best for any microcomputer, other than purpose-made chess hardware. At last, a program that can run on the QL that is better than Psion Chess! I was able to play Psion chess, running on a Gold Card QL, against MChess running on another Gold Card QL under Conqueror. That MChess would run at all is impressive, as it has a very hardware dependant protection routine, normally requiring a hard disk, which the QL used did not have. Conqueror used a Miracle ED disk, and easily fooled MChess into thinking that it was a real PC hard disk. Older versions of Conqueror would not run MChess, as the protection routines defeated them. I was glad that MChess would run, and spent much of the review period playing with it instead of writing this review!

MChess was able to beat Psion chess easily, analysing thousands of positions per minute, and problem solving very quickly too. One problem solved by Psion Chess on my old system in 17 seconds, and on Gold Card in just over four seconds, took less than three seconds to be solved by MChess running under the emulator. The protection routine on MChess normally prevents it being backed up, but the Conqueror pseudo-hard disk is easily backed up, as the PC disk partition that Conqueror uses is simply an ordinary file to QDOS, which makes life very much simpler.

One of the last tests I performed was to run a demonstration version of Sage Accounts, a leading UK business finance program. Running at its maximum speed, the result was startling: Conqueror Gold Special Edition was fast enough so that text messages, pop-up windows, displays and block graphics flashed by, so quickly that it was impossible to read them. Of course, I could easily have set the program to run at a sensible speed, but I

## CONQUEROR GOLD S/E - (CONT'D)

wanted to see how fast Conqueror could go. The result was simple, Conqueror was too fast for this demo display, and I never thought anything I ran would produce that result.

### The manual:

My previous impressions of Conqueror manuals were very good, but after listening to other users, and rereading, I have downgraded my view of the manual from "superb" to merely "good, with flaws". In particular, some people seem to have had trouble working out how to remap the keyboard, which a few PC applications may require, and how to install a Conqueror pseudo hard disk. As has been stated, the hard disk option is able to fool PC software into thinking that it is using a hard disk when it is, in fact, using a QL floppy disk, ramdisk or even a microdrive. The microdrive option is a joke really, so Digital Precision won't support it, but I suppose it gives those with a warped sense of humour something to do for half an hour on a wet afternoon..

- . The manual really does contain all the information that you need, it is just that some of it is a little hard to find, or a little hard to understand on first reading. For those having trouble, I will include a description of how to install a Conqueror pseudo hard disk on a floppy disk, assuming a Miracle ED drive. There isn't much difference to the procedure if you are using a different disk drive, even if it is a QL hard disk, so hopefully this will help out a few who have this particular problem.

### Installing a pseudo hard disk:

The first step to creating your Conqueror pseudo hard disk (PHD for short from now on) is to decide how big you want the disk partition, in KILOBYTES. On a Miracle Systems ED disk drive, you can have a file up to 3128k, so this is the size to choose for your PHD if you have such a drive available. If you have a real hard disk, you can choose a larger size, and if using ordinary QL floppy disk drives, the size will have to be smaller.

Next, make the blank, formatted floppy disk available, i.e. put the disk in the drive, and LEAVE IT THERE for the whole exercise. If using a hard disk, simply make sure that there is enough blank space available to accommodate your chosen file. When you look at the disk from QDOS (that is, when NOT running PC Conqueror) the PC hard disk partition will just be another QL file in the directory, and you can back it up by copying it in the usual way.

Using the other drive, start the Conqueror configurator. The option is included to configure one drive, say ffp2\_, to contain a PHD. This is done by specifying a filename for the partition, the default is ffp2\_DOS, and this is actually a reasonable name, hard disk users could use win1\_DOS\_PARTITION. When you have specified both the filename and the partition size, and any other Conqueror options that you wish, exit the configurator. Use 3128k as the size for ED disks. Only as you exit will the partition be created, and this is equivalent to a low level format of the PC hard disk. Next comes the tricky part, and this almost exactly as it would be done on a real PC.

1. Put the prepared floppy disk, with the partition file on it, in the correct disk drive. (ffp2\_, remember). This disk must stay there for the whole time, and must never be removed while Conqueror is running, only after you exit Conqueror. PCs cannot cope if you remove the hard disk while they are switched on, so Conqueror can't either!
2. Boot Conqueror from floppy disk in the usual way, using 1 and NOT W.

## CONQUEROR GOLD S/E - (CONT'D)

3. When the A> prompt appears, enter the command FDISK.
4. When FDISK loads, opt to create as a DOS partition using all the cylinders of the hard disk. This is the default. (If you really know your PCs, you may partition the disk in other ways - but only if you are very sure of your knowledge should you do this).
5. Choose to make this partition, (Number 1, the only one in our example) "bootable".
6. FDISK formats the hard disk as instructed.
7. When FDISK is finished, call up the Conqueror supervisor screen.
8. Choose the option to reset Conqueror, rebooting DOS from floppy.
9. If using MS-DOS and not DR-DOS, enter FORMAT C: (you may need to specify some other parameter, see the manual for your version of DOS).
10. Enter the command SYS C: (This transfers the invisible DOS boot files and COMMAND.COM to your PHD)
11. COPY or XCOPY all the DOS files that you regularly use from A: to C:, e.g. FORMAT.COM, XCOPY.EXE etc.
12. Exit Conqueror, and you now have a bootable pseudo hard disk.

To use it, put Conqueror in f1p1\_, the disk containing the PHD in f1p2\_, and then reset the QL. At the Conqueror start up screen press W. You will soon be at the startup prompt, C> instead of A>. f1p1\_ will now serve as both A: and B: drives, and f1p2\_ DOS is your PC hard disk, drive C:. Edit your own AUTOEXEC.BAT and CONFIG.SYS files if needed, see your DOS documentation.

This might seem horribly complex, but most of the problems come from the use of MS-DOS or DR-DOS, as they are much more complex and difficult to use than QDOS. If you want, Digital Precision will even sell you a prepared Pseudo hard disk, saving you all the work, and avoiding all the beginners errors that you might make. Keep backups - remember, you must not remove the PHD while Conqueror is running, nor ever write protect it while running either. PCs cannot cope if their hard disks are changed or write protected while they run, as stated before, so Conqueror can't be expected to.

### Conclusions:

OK, so what do I think of all this? Well, if you found the old Solution or Conqueror useful, and you have the hardware to run PC Conqueror Gold Special Edition, then I think you will be pleased with the advances over your current emulator. Certainly if you run PC software that often runs out of memory on your current Solution or Conqueror setup, the upgrade is well worth having. The weaknesses in the earlier versions of the manual have been addressed, and Digital Precision provide a very clear QUILL document on the Conqueror disk that should clear up any remaining questions about pseudo hard disks.

Emulators generally are amazing, and PC Conqueror Gold SE is no exception there. It is amply fast enough, very compatible, and well worth the money if you need to make use of PC software. Superb!

# Fed up of DIGITAL PRECISION telling you how very good their software is?

✓ "As you might surmise by this time, I am impressed by QMATHS's abilities. Having noted that DIGITAL PRECISION's advertising tends to be loaded with superlatives (incredible, ultimate, superb come to mind), I had approached this evaluation with some scepticism. That scepticism has vanished." > INTERNATIONAL QL REPORT (IQLR, available from Miracle Systems) May/June 1993 issue, Official Review by M.Laverne commissioned by IQLR (who bought their review copy of the program).

✓ "PERFECTION is an exciting, full-flavoured, general purpose word processor of incredible capacity... PERFECTION has now been outshone by the recently released PERFECTION SPECIAL EDITION... The discoveries began to trip over themselves as PERFECTION SE responded to the keyboard with unexpected speed and intelligence... PERFECTION SE is blindingly fast at most things, and you are never left waiting for it. PERFECTION is everything that Quill never became: easy to use, very flexible, loaded with genuinely useful features, cleanly multi-tasking, capacious and incredibly fast. The SPECIAL EDITION offers 12 cylinder power and luxury to an already impressive package." > SINCLAIR QL WORLD magazine Official Review, April 1993 issue, by THE Mike Lloyd of Keyword Index / New QL User Guide fame.

✓ "I find PROFESSIONAL PUBLISHER an outstandingly good program that really does allow highly professional documents to be produced. For your interest I have included a few samples of work done for school using a combination of PERFECTION, PROFESSIONAL PUBLISHER, QUICKLASER and EYE-Q. You will be pleased to know that the quality has been rated so highly that people do not believe it can really have been done with just a QL... I must stress that I am already highly impressed with, and very satisfied by, the performance of PROFESSIONAL PUBLISHER and all the other DP programs that I use... I seem to learn something new that can be done almost each time I use the program. Very many thanks for helping to keep the QL ahead of the field." > Martin J Neave, Headteacher, Watton County Jnr School, Brandon Rd, Watton, Norfolk IP25 6AL (unsolicited letter dated 18 May 1993 ordering more programs: Mr Neave had paid full price for everything).

✓ "LIGHTNING SPECIAL EDITION accelerates QL operation as nothing else does... more than 10x is achievable and 2x-4x is typical... I could not fault LIGHTNING SPECIAL EDITION on anything. It is a clear winner and a best buy at £49.95." > SINCLAIR QL WORLD magazine Official Review, April 1990 issue, by Ron Massey, who wrote EDITOR (bought full price) was "Superb" in an earlier review.

✓ "PERFECTION is well named" > R.H.Petford, Kingston Hill, Surrey, KT2 7LJ (unsolicited letter received May 25, 1993: another full price purchaser & upgrader).

✓ "When my ideal program finally arrived in the form of PROFESSIONAL PUBLISHER, it surpassed all my expectations.. PROFESSIONAL PUBLISHER (is) in a class of its own, and makes it the only QL desktop publishing program for the very serious user... Until Digital Precision released PROFESSIONAL PUBLISHER, my opinion was that the use I could make of desktop publishing was mainly restricted to short documents... PROFESSIONAL PUBLISHER is a very versatile program... The illustrations for this series of articles have all been produced on PROFESSIONAL PUBLISHER... My printer is a BROTHER 9-pin dot matrix printer. It does illustrate the very high quality that can be obtained from PROFESSIONAL PUBLISHER even when using a simple printer." > SINCLAIR QL WORLD magazine Guide to desktop publishing ("A Question of Dots"), January 1992 to December 1992 issues: the reviewer had bought PROFESSIONAL PUBLISHER, PERFECTION SE, FONT ENLARGER, TOOLBOXES, QUICKLASER etc from Digital Precision all at full price.

✓ "I am aware that over the years Digital Precision has given considerable support to the QL scene but seldom, if ever, can there have been such estimable service as I recently encountered with PERFECTION PLUS." > The Hon. W.D.R. Spens, Bridgewater, Somerset, TA5 1HG, QUANTA magazine, March 1992 issue. Mr Spens bought a lot of his software from Digital Precision, all at full price of course.

✓ "The Digital Precision Desktop Publisher was rightly hailed as an extraordinary programming achievement when it was released two years ago. Mike Lloyd casts a professional eye over Digital Precision's latest page-making blockbuster (PROFESSIONAL PUBLISHER) and finds plenty to be pleased about... there is unlikely to be a single program of such magnitude and quality (as PROFESSIONAL PUBLISHER) written for the Sinclair QL." > SINCLAIR QL WORLD Official Review, August 1989 issue, by M.Lloyd, who personally bought all this at full price.

✓ "EDITOR is a liberation. After Quill, it was like jumping from an aquarium into the sea. It has become part of my professional life... Everyone is now writing about the excellence of PERFECTION. I have not tried it, not having any perceived need for it (having EDITOR)" > Suzanne Cronje, QUANTA magazine, May 1992 issue, page 2. Ms Cronje naturally had paid the full price for her copy of EDITOR SE.

✓ "I have found (PERFECTION) to be simply excellent, fast, packed with features and very well thought out. I can find little to say that will convey just how good this program is, except to quote Digital Precision's own advertising: PERFECTION will blow your socks off. PERFECTION is the program that Quill users have been waiting for." > SINCLAIR QL WORLD magazine first Official Review, May 1991 issue.

✓ "Digital Precision (DP) decided to begin work on a replacement for Quill which would be very quick, simple to use and contain lots of excellent features - something upon which DP have built a very strong reputation in the QL market... Overall, the speed-up (of just the first release of PERFECTION - it is much faster now) on even a humble QL with Trump Card is amazing when compared with Quill (or any other word processor). On top of this, the program provides many excellent and well thought out features, each of which is easy to use... (it) is certainly years ahead of the competition on the QL (and even on many PCs)." > R.Mellor, c/o CGH Services, Cwm Gwen Hall, Pendre, Dyfed SA39 9HA; Official Review of the very first version of PERFECTION in QL TECHNICAL REVIEW issue 7: and the reviewer personally bought his own copy of this program, and many others at full price, from Digital Precision. Earlier QLTR reviews pronounced LIGHTNING (just the standard version) superior to the competition and ADVENTURE CREATION TOOL excellent.

✓ "As a recent user of PERFECTION PLUS SE, may I add my thanks and praises to the ones I am sure you have already received... keep up the excellent work." > R.Sawson, East Molesey, Surrey KT8 0BP (unsolicited letter from full price purchaser).

✓ "At about 360,000 words, the Mega SPELLCHECKER dictionary does not have much competition, on any computer! (Spellchecking) is about four times as fast as the best figures I have seen with other checkers on QL and PC." > SINCLAIR QL WORLD magazine official review of PERFECTION spellchecker, September 1992 issue, by Bryan Davies of Troubleshooter reprints (review copies of all the competing products supplied to SINCLAIR QL WORLD by their respective publishers).

✓ "I have been using PROFESSIONAL PUBLISHER for about eighteen months now... what you can do with it is colossal... I got Digital Precision's QUICKLASER. The results are as good as (Digital Precision) says in its advertisements..." > P.Hamill, Peterborough, Cambs PE8 6RH, QUANTA magazine, Volume 9 issues 4/12. Mr Hamill (full price purchaser) then makes suggestions to users re optimal page sizes.

✓ "Once again I would like to say thank you for your help. I would like to tell the world what nice guys you are but unfortunately I have no contact with the outside world." > J.Bailey, Godshill, Ventnor PO38 3JJ (full price purchaser, 24 May 1993).

✓ "PC CONQUEROR GOLD SPECIAL EDITION is an excellent product, accompanied, as so often with Digital Precision software, by a comprehensive and informative manual. The program does a difficult job, and does it well... Overall, this program is much faster, more compatible and capable..." > SINCLAIR QL WORLD Official Review, March 1993 issue, by M.Knight (bought many DP programs full price).

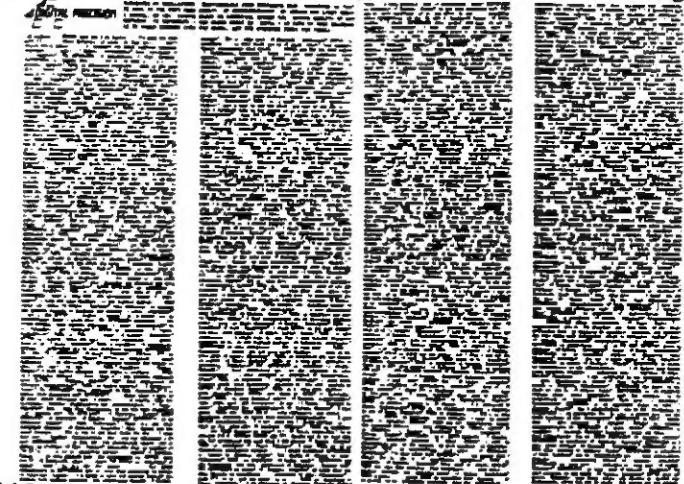
✓ "Many thanks for the update of PERFECTION SPECIAL EDITION. I am suitably impressed. Congratulations on producing the only word processor that I know that offers the best of all worlds as far as formatting is concerned. After Quill, PERFECTION is like a breath of fresh air." > Geoff Wicks, 1097HL Amsterdam, Netherlands (unsolicited letter dated 13 June 1993: all software including LIGHTNING PERFECTION SE, PRO PUBLISHER, CONQUEROR SE etc. purchased at full price).

✓ "All I can say about QMATHS is: WOW!" > Robin Wyke-Holloway, Salisbury SP5 4WG (unsolicited letter received April 1993: Mr Holloway is a full price purchaser).

✓ "Having used a range of desktop publishers on the Atari ST & Amiga, I admit I am very impressed with the superior performance of PROFESSIONAL PUBLISHER. It contains everything required" > SINCLAIR QL WORLD January 1989 issue, article entitled "6 of the Best" which also praised five other new Digital Precision programs.

✓ "May I take this opportunity to say that I have, in the past, found the software you have supplied me with (LIGHTNING etc.) to be of extremely high standard, on a par with that found in industry-standard PC packages. Keep up the good work. Without your quality software, I would be forced to abandon the QL and go to a PC." > G. Reynolds, Crosby, Liverpool L23 0SS (unsolicited letter dated April 2 1993, placing a further order for DP software: all programs old & new were purchased at full price).

✓ This twenty is but a casual selection, drawing only on extracts from letters received by DIGITAL PRECISION in the last few days and from articles (in respected, independent QL journals) that just happened to be to hand. If we really had to, we could locate about 1,100 equally complimentary recent communications (the figure has been carefully arrived at by sampling all our correspondence files): pleasant though such a trawl would be, we have more pressing things to do, like keep refining our programs! In case any scepticism still exists, we refer potential purchasers of our products to pages 18 and 19 of the September 1988 issue of Sinclair QL World, which contained three to four hundred other unsolicited quotations from happy Digital Precision customers (together with the customer's name and whereabouts), all of whom had bought their DP programs. That collection covered only three programs (and only partly - we ran out of space) and predated our best software (LIGHTNING SE, PERFECTION (+SE), PROFESSIONAL PUBLISHER, PC CONQUEROR (+SE) etc). We reproduce those pages below, duly reduced to fit (no magnifying lens supplied, nor eyesight lawsuits solicited). Don't think DP hides behind small print: send an SAE for a full-size copy, or ask for one free while ordering!



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## **FILE TRANSFERS**



# **ARCHIVE to DBASE**

Pylesville, Maryland USA - Thomas Robbins

*This is the second of several articles concerning the interchange of data between QL/QDOS applications programs and MSDOS applications programs.*

*In the first article of this series, a method of exporting Archive data to the MSDOS based DBase data base was discussed. This article will discuss the movement of data in the other direction - from MSDOS/DBase to QL/ARCHIVE.*

For a starting point in understanding the import/export file structure, refer to the INFORMATION section of the QL manual - it's the last section of the manual. Page 1 and 2 of this section deal with importing and exporting data.

### **Materials Needed On the PC side**

1. PC/Clone
2. DBase III+, file to be converted, formatted IBM disk compatible in size with your QL disk drive.

### **On the QL side**

1. QL/QL Compatible with 2 disk drives or 1 disk drive and a ram disk.
2. Xchange or Archive and Abacus

Let me put in a recommendation here. Get Xchange. It is now public domain and is available from several sources:

A.	QL Users Group(WM) 16 Westfield Road Birmingham B27 7TL United Kingdom	Send self addressed envelope and 2 pounds 3 1/2 disks only
B.	QUBBESoft P/D 38 Brunwin Rd. Rayne, Braintree Essex CM7 5BU United Kingdom	1 pound Sterling + 1.50 pounds post & packing

C. Send me a formatted 3 1/2 or 5 1/4 disk, a self addressed stamped envelope, or a self addressed envelope and a postal International Reply Coupon if you are outside the U.S.

Thomas Robbins  
4037 Grandview Dr.  
Pylesville, MD. 21237  
USA

3. An MSDOS/QL file transfer program such as QLIBM (available on Quanta Library Disk CT-1), DisCover, IBMcopy, XOVER or Media Manager.

## FILE TRANSFERS - (CONT'D)

Two methods for data transfer will be discussed. The first method uses Abacus as a way-station to add the field names required by Archive. It also gives the opportunity to rename, delete or add fields. The drawback to this technique is that it is limited to files of no more than 254 records. The second method uses a text editor to add the necessary field names and does not have this limitation.

Procedure for method 1 (Abacus way-station):

1. Load DBase on the PC
2. Open the file which you wish to convert to Archive format
3. Place an MSDOS formatted disk in drive A
4. At the DBase dot prompt, enter the command:

### LIST STRUCTURE

Copy the field names and types from the screen.

5. At the DBase dot prompt, enter the command:

**COPY TO A:MYFILE.CDF DELIM**

Where MYFILE.CDF is the name you have chosen for your conversion/export file.

6. Quit DBase, remove the disk from the A drive and turn the PC off.
7. Turn on the QL and load/execute your file transfer program.
8. Transfer the file to QL a formatted disk.
9. The file is almost in a suitable form for importing into Archive. All that's necessary is to have the first line contain the field names as described in the first article in this series. If your DBase file has less than 254 records, you can go through Abacus to add this data. Load Abacus and move the cursor to cell A2. Use the F3, files, Import command(enter F3 f i). The prompt at the bottom of the screen asks you for the file name to import. Enter the name of the file you just converted ( eg. FLP1\_MYFILE CDF). Abacus will prompt you with "by rows". Do NOT accept this default. Press "c" to indicate "by column". Accept the default of "to cell A2" and press enter. Your file will be imported into Abacus with each row being a record. There will be an empty row at A.
10. In row A, enter the field names as text for each column.
11. Export this file by columns, preferably to ram disk for speed. F3 F(iles) E(xport) A(bacus) <ENTER> C(olumns) filename.

12. Switch to Archive and import the file (using the ram disk speeds this up considerably). The command sequence in Archive is:

import

    enter the file name to be imported

Archive prompts "as"

    enter the drive and filename you wish the data base to be saved to

Press <ENTER>

Your file is now imported. DON'T forget to close it!!

Reminder: Using this technique, you are limited to a file of 254 records or less. This limit is imposed by the fact that there are only 255 rows in Abacus, and you need the first row for field names. In this technique, each Abacus column is a field and each row is a record.

## FILE TRANSFERS - (CONT'D)

Procedure for method 2 (Text Editor):

1. Load DBase on the PC
2. Open the file which you wish to convert to Archive format.
3. Place an MSDOS formatted disk in drive A
4. At the DBase dot prompt, enter the command:

### LIST STRUCTURE

Copy the field names and types from the screen.

5. At the DBase dot prompt, enter the command:

**COPY TO A:MYFILE.CDF DELIM**

Where MYFILE.CDF is the name you have chosen for your conversion/export file.

6. Quit DBase, remove the disk from the A drive and turn the PC off.
7. Turn on the QL and load/execute your file transfer program.
8. Transfer the file to QL a formatted disk.
9. The file is almost in a suitable form for importing into Archive. All that is necessary is to have the first line contain the field names as described in the first article in this series.
10. Load a text editor - in this example, I will use Xchange, but I have also used Digital Precisions 'EDITOR' and Ark's "SPY" to accomplish this transfer.
11. Open the converted file to be transferred. Using Xchange, select a Quill task and use the files import command - F3 F I then enter the drive and file name ie.FLP1\_myfile\_cdf <ENTER> accept Quills default of "by line"
12. Insert a new line at the top of the file you have just imported. Get out the list you made in step 4. Type in the field names on this first line, separated by commas, and with a \$ at the end of each string field.

**EXAMPLE: "Lname\$","Fname\$","age","height","address\$"**

ALL field names MUST have quotes and MUST be separated by commas. All character fields MUST end in \$.

13. Export this to a ram disk or floppy. If you are using Editor or Spy, use the 'WRITE' command.
14. Switch to Archive and import the file (using the ram disk speeds this up considerably).

The command sequence in Archive is:

import

    enter the file name to be imported

Archive prompts "as"

    enter the drive and filename you wish the data base to be saved to

Press <ENTER>

    Your file is now imported. DON'T forget to close it!!

If you do not have Xchange, EDITOR or SPY, you can get to the same place in a roundabout manner using Quill. You will have to create a new printer driver and use the Quill design parameters.

## FILE TRANSFERS - (CONT'D)

I have used this technique with DBase files containing numeric and string/character fields. There are several things I have not tried, so a note of caution - I don't know what happens if some of your fields in DBase are date fields or logical fields. I also don't know what would happen if the total length of a given record exceeds the maximum width of your editor. The maximum width in Xchange-Quill appears to be 160 characters, allowing for 10 16 character wide fields. I have never had to try to get around this limitation, but I suspect that the 'SPY' editor from Ark would work.

In the next article in this series, transfer of data between MSDOS/Lotus and QL/Archive will be discussed. I hope some of you have found this information useful.

## QL - HDD Card

Troy, Michigan, USA - Don Walterman

After purchasing the Gold Card, the next hardware upgrade I wanted was a hard disk. I bought the QL-HDD-Card at the 'Miracle in Newport'. The package I purchased included the HDD-Card, an Omti MFM 8 bit controller and a 90 degree adapter that folds the two cards up next to each other. I can't praise this product enough. The HDD-card has worked perfectly from the beginning.

The manual is clear and well presented. The only addition I'd like to see would be an appendix listing the most popular drive types and associated disk parameters. This probably wasn't done due to the huge number of different drives on the market.

Installation was simple. The HDD card uses the only available rom address space on the Gold Card. The manual details addressing for owners of the JFC Rom Card, Miracle Trump Card and both red and yellow versions of the Gold Card. You will need a bus expansion card of some kind in order to connect everything at one time. My Gold Card used port \$C000 or switches 1 and 2 on and 3, 4 and 5 off.

Formatting the disk is a two step procedure. The win\_format command is used to specify your individual drives configuration of interleave factor, cluster size, number of sectors per track, number of heads, number of cylinders, precompensation start cylinder and reduced write current start cylinder. For my drive, a Seagate ST4053 42 MByte MFM style, the command looks like this :

```
win_format 1,4,17,5,1023,0,0
```

The next step is the format command you are used to with floppy drives.

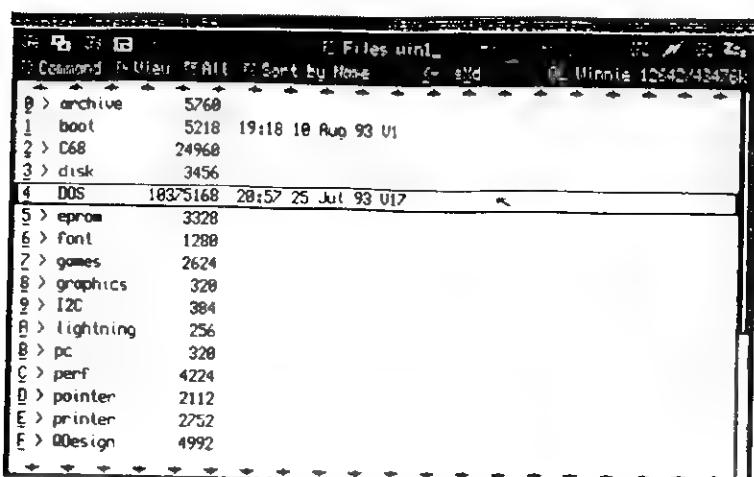
```
format win1_[pick a name]
```

Some older hard drives are now cheaper than ED floppy drives! Two other IQLR readers and myself bought drives from Hi Tech. They are selling the Seagate ST4053 MFM drive for \$79 (\$69 if you ask for the bare drive without the 16 bit controller that you cannot use). If you purchase the bare drive you also will need the two ribbon cables to connect the drive with the Omti or Western Digital controller. This drive is a 5 1/4" full height form factor. The access speed is better than many older drives at 28ms but slower than the fastest drives on the market today. Some points to consider when purchasing a hard drive:

## QL-HDD-CARD - (CONT'D)

The HDD Card supports either MFM or RLL controllers. Make sure the drive you purchase matches the controller. You can't mix drive and controller. MFM or RLL drives are very nearly obsolete. It will be harder and harder to find new units. Scan the refurbished market like Hi-Tech for real bargains.

A rough rule of thumb is: older drives will be bigger, slower, noisier, cheaper and require a bigger power supply. Newer drives will be smaller, faster, quieter, more reliable and more expensive.



When storing files on your new hard drive, I'd recommend using a rational plan for subdirectories. My system has only directories plus the boot file and the DOS partition at the root (top) level of the disk. This allows the files portion of QPAC2 to display everything on one screen. I also have a temp directory for all files that don't have an obvious home. It is very easy to lose track of files if you don't plan ahead. I've had good luck getting all my software to run properly without having to use the dev\_use command.

The Gold Card brought a new level of performance to my system. The addition of this hard drive has brought a further leap in performance and user enjoyment. QPAC2 and the hard drive are a great combination. I split my drive up with 32 MBytes given to QDOS and 10 MBytes dedicated to Conqueror and MS-DOS. Using SuperStore the MS-DOS 10 MByte partition is now 20 MBytes so my drive looks like a 52 MByte drive.

I would encourage anyone considering a hard drive to consider the JFC product. It is simple and reliable. What more can you ask for? I'd be happy to answer any questions about the JFC package or hard drives in general. I can be contacted through IQLR.

The QL-HDD-Card can be purchased from Computer Technik Jürgen Falkenberg in Germany, William Richardson in the U.K. or Mechanical Affinity in the United States.

Drives are available from: Hi-Tech (800) 966-5454 Ask for Drive Sales.

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The IQLR binder for volume 3 has created a tremendous demand for binders for volumes 1 and 2, we are therefore happy to announce that separate binders for volumes 1 and 2 are NOW available directly from IQLR. The price per binder is \$7.95 each in the US, \$10.00 each to Canada and Central/South America, and £10 or DM 25 each (or the US \$ equivalent) to the rest of the world. The prices include the high cost of Priority Mail in the US and Air Mail service everywhere else.

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# IMPROVING THE QL'S SOUND

Shelby Township, Michigan, USA - John J. Impellizzeri

In this article I will describe a couple of ways to improve the sound output of the QL. While I haven't yet figured out a way to add a PC Soundblaster type board to the QL, what it does have can be improved with a few small changes. These changes can be done to any QL, stock to Gold Card equipped to QL's in a PC case.

It has been noted in the past that the QL's sound generation can be a bit unpredictable. The Hermes replacement co-processor solves this problem. However one of my complaints was that there was no control over how loud or soft the sound was or that I could not turn the sound off so as not to disturb anyone if I was using the QL late at night (or early in the morning...). Some software that uses sound will allow you the option of turning its sound off, but not all do. Another problem is that the QL's built in speaker is quite small, about an inch or so in diameter. Small speakers don't always reproduce a full range of sound accurately. Think of the difference in sound between a pocket radio and that of a high fidelity stereo system.

What is needed is a way to bring the sound signal out of the QL and into something that can control the loudness and drive a larger speaker. I would not recommend simply connecting a larger speaker in place of the built in speaker. The internal unit has an impedance specification of 60 ohms and typically most speakers have an impedance of 4 to 16 ohms. Connecting one of these could result in little or no sound or even damage to the QL's circuitry. It is much better to connect the QL to an amplifier and let the amplifier drive a larger speaker. Doing this will also give you control of the sound from full off to wake-the-neighbors.

In my case, I had an amplifier and speaker handy, they were built in to my monitor! I use a Magnavox RGB 80 monitor (model #CM8562) that has a switchable RGB or composite video input along with an audio input for use with a VCR, etc. Since the audio input remains active when the RGB input is selected it was a natural for the QL. The monitor has a volume control on the front panel and about a 3 inch speaker with a one watt amplifier. It is quite capable of filling the room with the sound from the QL. But since I also use my QL with another monitor that has no audio capability when I go to our local users group meeting, I wanted to retain the ability to use the QL's internal speaker if needed. Rather than dealing with some type of switching arrangement (and finding room for it in the QL), I decided to wire a jack like an earphone jack in a small radio or TV is wired. That is, with nothing plugged in the internal speaker operates. When you plug an external device into the jack, the internal speaker is silenced and the sound routed to the external device.

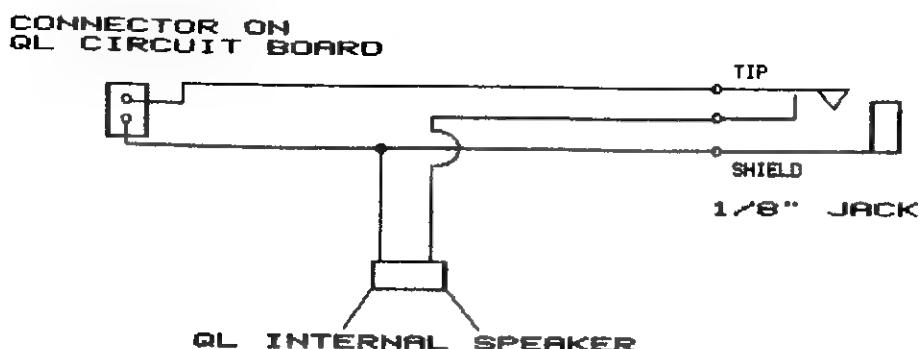
Even if you use a monitor that has no audio circuitry please keep reading. You can still do the modification to the QL and use almost any audio amplifier. Radio Shack makes a small, inexpensive (\$12) amplifier/speaker (cat # 277-1008) that works well in this application. The speaker in the Radio Shack amp isn't much larger than the QL's although it is better. You also have control of the volume and the amp does have an external speaker jack, so you could still connect a larger speaker if you wish.

Because this project involves opening up your QL and doing some soldering inside, please use caution and/or seek help from someone skilled in electronics. Neither I nor IQLR can be responsible for any damage done to your QL.

## IMPROVING THE QL'S SOUND - (CONT'D)

First, remove all peripherals and connections to the QL, open the case and carefully remove the keyboard ribbons and the six leads going to the power and mdv LED's. Make a note of the position of the six wires before you disconnect them. To remove them, pull up on the connector shell and the wires will be released. If your QL is in a PC type case, open it up to get to the QL's circuit board. Next find a spot to mount the jack. If you have a QL in its original case, I found a good spot on the back of the case about an inch to the right of the ROM port (looking at the back of the QL with the keyboard facing up). Carefully drill a hole in the case and mount the jack. If you have a PC case, you have more flexibility and can place it just about anywhere.

## EXTERNAL SOUND FOR THE QL



Locate the two wires going to the speaker. These are connected just below the six wires to the LED's. Disconnect them in the same way as the LED wires. Take a piece of wire and connect one end to the ground or shield lug on the jack. Take another short piece of wire and connect it and the wire from the jack with the black lead from the speaker. Connect the other end of the short piece to the lower socket of the connector on the QL. Use another piece of wire to connect the upper socket of the QL connector to the tip lug of the jack. Press the connector shell down to secure the two wires. Using another wire, connect it to the remaining lug of the jack and splice the other end to the red speaker lead. Tape up the spliced connections to prevent any short circuits. Double check your wiring for errors.

Temporarily reassemble the keyboard leads and connect up the QL to your monitor and power supply. Check to make sure the internal speaker still works with nothing plugged into the jack. If it does not, recheck your wiring. If it does, plug a patch cord into the jack and into whatever you are going to use as an amplifier. Turn the amp on and check to see if the QL's sound is now reproduced by the amp. You should have complete control of the sound now from full off to quite loud. If you notice any high frequency noise or interference in the background of the amplified sound try placing a 10 microFarad capacitor across the shield and tip lugs of the jack. This will filter out the noise.

Finish reassembling the QL by carefully routing the new wires so they don't interfere with closing the case back up or by plugging any expansion cards into the QL. Don't forget to reconnect the six leads for the LED's. Test the QL to make sure everything works and enjoy!

## IMPROVING THE QL'S SOUND

### PARTS LIST

Not all parts listed may be needed - it depends on your QL configuration. These are only suggestions.

Item	Radio Shack part #
Mini Amp/Speaker	277-1008
1/8" 2 cond jack	274-248
10 uF Capacitor	272-999
Hookup wire	278-1218
Patch cord	depends on the amp you use
-for Mini Amp	42-2420
-for Magnavox monitor	42-2444
solder	
electrical tape	

## C68 COMPILER UPDATE

Tiverton, Rhode Island, USA - Dick Taylor

I've recently received Release 4.00, the lastest update to C68 for QDOS from Dave Walker. Dave informs me that although there was a long delay between Release 3.05 and Release 4.00, the next release (tentatively titled Release 4.10), will follow fairly quickly as there is already sufficient new facilities that are in the late stages of testing to justify a new release. Dave anticipates release of 4.10 around Christmas. This release will be relatively transparent, and is intended to be mainly an additional facility upgrade.

Dave recommends existing users keep their copy of Release 3.05 until they are happy with Release 4.00. This is not because of anticipated "bugs" in Release 4.00, on the contrary, this release should have fewer bugs than Release 3.05. Release 4.00 is almost completely ANSI compatible, and therefore enforces the ANSI rules. Release 3.05 was not quite as strict, so code that was not really legal was being accepted. In particular this applies to the QPTR (Release 2) library, all the examples will, (quite correctly), compile with errors when used with Release 4.00 of C68. When revised copies of the C68 companion disks are ready, they will include all necessary corrections to allow for this.

I presently have five disks for Release 4.00, three runtime disks and two source code disks. The updates to the associated disks should be available shortly and I will keep you advised.

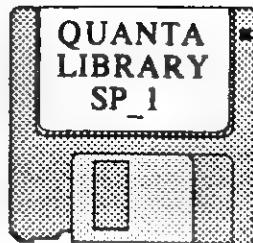
Anyone in North America desiring a copy of C68 Release 4.00 can obtain it by sending the required number of FORMATTED disks (3 or 5 depending on whether or not you need the source code), and sufficient return postage to myself or IQLR. C68 users in the rest of the world can obtain the disks from their normal distribution sources.

Dick Taylor  
309 Holly Circle  
Tiverton, RI 02878  
USA

# "CRYPT"

Written by D. WEBSTER  
Bangor, NORTHERN IRELAND - Len Johnston

*This is one of the many useful programs to be found in the Quanta Library, this particular program is on the SPECIALS\_1 disk. Why not take advantage of this great library, join Quanta today.*



My brother is an accountant and in the course of his work handles a great deal of confidential information about his client's financial affairs. When he bought a new QL recently he asked me to provide him with a password system so that if the computer was stolen this confidential information would not fall into the wrong hands.

This seemed easy enough but when I really looked at it the problems became obvious. A simple automatic boot reset could be done easily but just as easily copied to screen and bypassed by reading the password! Something more was needed!

He needed to protect Abacus data files and also text files from Quill or Text87plus4. The password system Turbo\_Xchange used looked good ...at first! We soon found that the ordinary standard Abacus would load the files from Xchange whether or not they were protected by the password system provided in Xchange. Same with Quill!

What was needed was a program to really scramble the information so that even if it was copied to screen from disc it would remain unreadable. This is exactly what Crypt does.

I installed the program Crypt\_exe on my QPAC disc so that I could switch to it when I wanted to save my files in encrypted form. Saving them this way only takes about thirty seconds more and gives peace of mind.

This is how it works...

When you have finished work in Quill, Abacus, Text87 or whatever (Crypt doesn't mind what it scrambles!) save the file to ram1\_filename\_doc (or aba, t91 etc. The suffix will vary according to the program), instead of disc.

Quit from Quill or Abacus etc. Switch to Crypt or Exec Crypt if it is not already running. You will be presented with Crypt's screen in a few seconds. It is not a big program. This screen is a simple narrow red band of colour with "Crypt a Data Encryption Utility" printed at one side and a flashing cursor inviting you to input your file.

Type ram1\_filename\_doc (or aba or t\_91 as the case may be) and press enter. The screen will then ask you for the output file destination. Type flp1\_ or flp2\_filename\_doc (or aba or t91 etc) The suffix varies from program to program and is important. Do not omit it or the file will not reload next time!

You will then be asked for your user key. Type whatever you like but keep it short. Say four or five letters. I use the name of my car! Whatever you do...Don't forget it! You'll never see your files in plain English again if you do!

The program will then encrypt the file using your user key and will save the resulting gibberish to flp1\_ or wherever you asked it to save to. And that's all there is to it! To decrypt the file is just as easy!

## "CRYPT" - (CONT'D)

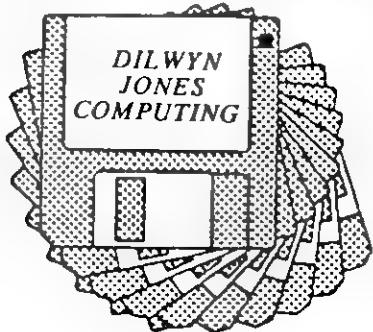
The input file becomes flp1\_ or flp2\_filename\_doc (or aba etc) The output file becomes ram1\_filename\_doc (or aba etc)

The user key must of course be the same one you used last time. Remember the warning about forgetting it? The program knows if the file has already been encrypted or not and automatically applies the opposite procedure to decrypt the file if it is already encrypted. All very user friendly!

Switch to Abacus or Quill and load the now decrypted file from ram1\_filename\_doc (or aba, t91 etc) as usual. I use ram\_ instead of flp\_ because the unencrypted file is destroyed after switching off. A small point perhaps but only common sense.

### Verdict?

The program works well and all errors are trapped properly. It encrypted everything I threw at it without the slightest bother. It was a little unnerving at first to see my files copied to screen in encrypted form but you soon get to trust the program's ability to restore the files to normal. All in all a very good little utility.



## SCREEN DAZZLER

Trafford, Alabama, USA — Bob Madaris

*SCREEN DAZZLER, written by Bruce Nicholls, is a screen saver with a twist (a screen saver is a task or procedure which monitors the keyboard and if no key has been pressed within the allotted time the screen is usually blanked out).*

SCREEN DAZZLER loads and runs one of the many screen manipulation or graphical display programs included with the program. At the start of the timeout period, at random one of the six included programs is loaded from FLP1 (as supplied). There are some dazzling displays on the screen at this time. When you press a key, you are returned to your current task's screen.

The documentation is excellent. SCREEN DAZZLER comes with a ten page user guide. The guide is well written and easy to follow. It will walk you through installing and starting the program. It will take you through making a backup copy. A short basic program is included on the master medium to make a backup copy. Also the user guide will instruct you how to re-configure the program, and a program to do this is included on the medium.

### REQUIREMENTS

The manual states that SCREEN DAZZLER will run on a QL with memory expansion of 256K (348K total). More on this later. The program actually requires 100K minimum and up to more than 200K depending on how it is configured by you. It does not require TK2 or ramdisks. It requires Turbo Toolkit and Super Sprite Generator Deluxe, the runtime versions of which are supplied on the medium. It also utilizes two DIY Toolkit extensions by Simon Goodwin which are also supplied on the medium. The program does not support Minerva dual screen mode.

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## QL SOFTWARE

A SELECTION FROM OUR RANGE OF NEARLY 100 PRODUCTS FOR THE QL  
NOT ENOUGH ROOM TO GIVE MUCH INFORMATION HERE, SO PLEASE  
ASK FOR OUR CATALOGUE (PHONE OR WRITE FOR A COPY).

QUICK MANDELBROT III	£15.00
Fractal graphics, mandelbrot set, Julia set, screen dump facility, use mode 4 or mode 8 to generate screens, background calculation option, save and load screens. Works on 128k QL disk or microdrive.	
STQL	£12.50
Atari ST screen transfer program for use with Discover. Converts Neochrome or Degas (all three resolutions in pi1, pi2 or pi3 format). 256k RAM, disk only.	
QUIZ MASTER II	£12.50
Similar to quiz game machines found in pubs and clubs, colourful, 2 sets of questions supplied, you can make up your own for use with this program. 128k RAM, disk or microdrive.	

## OTHER SOFTWARE

QLOAD and QREF	£15.00
Fast load and reference utility for basic programs.	
S EDIT	£20.00
Easy to use editor for plain text files.	
BASIC REPORTER	£10.00
Basic programming aid.	
OPD INTERCHANGE	£15.00
QL-ICL OPD file transfer software.	
LOCKSMITH	£14.95
Backup utility for cartridges.	
4MATTER	£14.95
Backup and transfer utility for disks.	
LOCKSMITH & 4MATTER	£23.50
Note: To use 4Matter, you need Locksmith, but 4Matter available separately for users who already have Locksmith.	
MDV TOOLCHEST	£14.95
Make your own microdrive toolkits!	
PILES 2	£12.00
Simple to use file backup, etc utility.	
FILEMASTER	£12.00
File backup and disk labeller program.	
THE COPHER	£12.00
Search for text in files on disks or hard disks.	
WINBACK 2	£25.00
Hard disk backup utility.	
BANTER	£25.00
Make banners/posters on dot matrix printers.	
VISION MIXER 1	£10.00
Screen display software.	
VISION MIXER PLUS	£22.50
Enhanced version of Vision Mixer.	
PICTUREMASTER	£15.00
Screen design program, ideal with Vision Mixer.	
PICTUREMASTER PLUS	£20.00
Enhanced version.	
THE PAINTER	£25.00
Painter driven graphics program.	
THE CLIPART	£12.00
Wide range of QL clipart on 3 disks.	
QRACIAL	£20.00
Painter driven fractal graphics software.	
PD2 CLIPART	£10.00
2 disks of QL clipart.	

SCREEN SNATCHER	£10.00
Grab screen displays shown by other programs.	
TEXT 'N' GRAPHIX	£20.00
Combine screen dumps with Quill text.	
TRANS24	£10.00
Graphics converter for 24 pin printers.	
SIDEWINDER PLUS	£24.95
Screen dumps, banners, etc for dot matrix printers.	
BIBLE TEXT DISKS	£20.00
Text of King James Bible, plain text or Quill _doc	
SPELLBOUND	£30.00
Spelling checker, not for painter environment.	
SPELLBOUND SE	£50.00
Enhanced version, not for painter environment.	
QUICK POSTERS	£10.00
Poster maker for Star printers.	
ADDRESS BOOK & LABEL PRINTER	£15.00
Store addresses and print address labels in Archive.	
GENEALOGIST 2ND EDITION	£30.00
Family trees and family history.	
BUDGET 128K GENRALOGIST	£12.00
Cut down version for unexpanded QL.	
FLASHBACK	£25.00
Fast, simple to use database.	
FLASHBACK SE	£40.00
Enhanced version.	
DISK INDEXER	£12.00
Create a database of the contents of your disks!	
DBEASY	£15.00
Archive utilities.	
DBPROGS	£15.00
More Archive utilities.	
NETWORK PROVER	£4.00
Plugs in network socket, visual indicators.	
SOLITAIRE	£15.00
The classic solitaire card game.	
THE FUGITIVE	£9.95
Text adventure.	
CRICKET SECRETARY	£12.00
Cricke scores etc. made easy with this program.	
QUESTION MASTER	£10.00
Questions and answers, use for revision and study.	
QM QUIZ 1	£5.00
General knowledge.	
QM QUIZ 2	£5.00
Classical music.	
QM QUIZ 3	£5.00
Questions about the QL and QL scene!	
COCKTAILS WAITER	£10.00
Drinks recipes, great for parties etc.	
FLEET TACTICAL COMMAND	£39.95
Classic naval simulation for networked QL.	
QTOP	£29.95
Painter utilities etc.	
HOMER BUDGET	£20.00
UK home finance and tax programs.	
SCREEN ECONOMISER	£10.00
Screen blanker.	
SLOWGOLD	£5.00
Slow down Gold Card (for old games etc)	
TASKMASTER	£25.00
Task switcher utility.	
DISK LABELLER	£10.00
Create smart labels for your floppy disks.	
THE CAT	£5.00
Multi column lists of files, on screen or printer.	
ROB ROY PACK	£10.00
Inkwell font printer, plus Cue Well.	

3D TERRAIN	£12.50
Three-D graphical representation of Abacus data.	
RETURN TO EDEN	£17.50
Role playing adventure game on 3 disks.	

## MAGAZINES

We now have in stock a limited number of back issues of the QL magazines formerly published by CGH Services and we can also offer individual copies of the new QL magazine 'QREVIEW'. Subscription details supplied with orders for any back issues. Individual copies of QReview (published by the editor of the other magazines described below, QReview to be launched end of June) available for £2.00 each (UK), £2.50 (Europe), or £3.50 (USA and rest of world). We can also offer attractive deals on complete sets of back issues of a magazine.

### QL TECHNICAL REVIEW

A non-games review magazine, 9 issues available at £2.00 each (UK), £2.50 (Europe), £3.50 (USA and rest of world).

COMPLETE SET £12.00 (UK), £16.00 (Europe), £24.00 (USA etc).

### QL ADVENTURER'S FORUM

Games based magazine, 9 issues in total available at £1.75 each (UK), £2.25 (Europe), £3.25 (USA etc).

### QL LEISURE REVIEW

Games based magazine, 2 issues published available at £2.00 each (UK), £2.50 (Europe), £3.50 (USA etc).

COMPLETE SET OF BOTH GAMES MAGAZINES (11 ISSUES) £14.00 (UK), £20.00 (Europe), £30.00 (USA etc).

### PLEASE NOTE: SMALL ORDERS

If total cost of order is less than £5.00, add £1.00 towards cost of small orders (bank charges etc) or we will make a loss on such orders!

## PAGE DESIGNER 3

This most delayed of all QL software of all time (I think!) is finally about to hit the streets. We were hoping to launch at the Bristol Quanta Workshop, England, 17th October 1993. PD3 is painter driven, can be controlled by mouse or keyboard, uses Pro Publisher compatible Hires fonts, features text import, full QL screen handling, graphics menu, cut and paste, 9 pin, 24 pin and HP Deskjet printers and so on. Can be used for making posters and other general mixed text and graphics applications. It has been a long hard slog getting this program out. I hope you will feel it was worth the delay!

Page Designer 3 ..... £40.00  
PD2 (send proof of purchase of old PD2) ..... £25.00

# DILWYN JONES COMPUTING

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NOT ENOUGH ROOM TO GIVE MUCH INFORMATION HERE HERE, SO PLEASE  
ASK FOR OUR CATALOGUE (PHONE OR WRITE FOR A COPY).

**SERMOUSE** £40.00  
A complete mouse system for the QL, to work with pointer driven programs such as QPAC2, Line Design, etc. N.B. ADD £5.00 POSTAGE!

**SIDEWRITER** £15.00  
For printing wide spreadsheets or plain text file sideways using a choice of character sizes on a 9 pin or 24 pin Epson compatible dot matrix printer. Sidewriter can be pointer driven, or used without pointer environment or unexpanded QL. On disk or microdrive.

**QL-GENEALOGIST 3660.00**  
Brand new pointer driven version of the popular Genealogist program. Ask for information! Can be controlled from the keyboard or using a QIMI or Serial Mouse. 'Pick' boxes, new 'county' field, improved dates, new 'birth/brief' report, improved loading and saving times, improved searching and notes. Requires at least 512k memory, disk only.  
Upgrade from version 2 £33.00  
Upgrade from version 1 £45.00  
Upgrade from 128k version: £50.00

**EASYPTR III part 1** £40.50  
Simplified pointer environment programming. Part 1 consists of sprite editor, menu editor and superbasic extensions to use menus in your own programs. Requires expanded memory, available on disk only.

**EASYPTR III part II** £20.00  
Consists of appendix manager and enhanced toolkit for control of menus etc in your programs.

**EASYPTR III part 3** £20.00  
Consists of Easysource and C library routines, etc.

**QLIBERATOR** £50.00  
Superb superbasic compiler, compiles virtually all of basic plus most toolkit commands, etc. Produce faster multitasking code from your basic programs. Compile resident extensions, use overlays, etc with the latest V3.36. Can be mouse controlled. Expanded memory required.

**BUDGET QLIBERATOR** £25.00  
Excellent value, compiles virtually all of superbasic. Not mouse controlled. Works on unexpanded QL.

**DJ TOOLKIT** £10.00  
Compact toolkit of BASIC extensions, ideal for use with Qliberator. Really useful programming commands can be distributed with your compiled programs if you wish. At this price, a bargain! Suitable for unexpanded QL.

**LINEDESIGN** £100.00  
Vector drawing package, uses outline fonts and clipart, move and resize text and graphics without loss of quality. Ideal for making posters, etc. Supplied with huge range of fonts and clipart on TEN disks! The more memory your system has, the better! Disk only, can be mouse controlled.

**DATA DESIGN 3** £60.00  
Superb, fast pointer driven database with free form field structures, with the option of disk based for large files if required, or smaller files can be kept in memory for speed. Expanded memory, disk only.  
API for Data Design £20.00  
Adds programmability in BASIC, C or ml/code.

**QPAC2** £39.95  
Tony Tebby's superb pointer environment package. Mouse or keyboard controlled, a good introduction to pointer environment. 256k ram min. Disk only.

**QPAC1** £19.95  
Ideal companion to QPAC2, consists of small accessory programs. Can be used with or without QPAC2. Expanded memory required, disk only.

**QTYP2** £29.95  
Tony Tebby's spelling checker program. Check spelling as you type OR check existing files retrospectively.

**DNSA** £29.00  
Interactive pointer driven machine code disassembler. 256k ram min. Disk only.

**MEGATOOLKIT** £25.00  
**EPROM VERSION** £40.00  
Large toolkit with over 200 BASIC extensions. Many examples supplied, extensive manual.

**FLIGHTDECK** £15.00  
QL flight simulator. Works on unexpanded QL.

**DISCOVER** £20.00  
The painless way to move files from QL to PC and vice versa. As simple as copying files between two disks. 256k ram min, disk only.

**MULTI DISCOVER** £30.00  
Also contains CPM, Unix CPIO, BBC micro, Spectrum and SAM Coupe file transfer capability. 256k min. ram, disk only.

**TEXTIDY** £15.00  
Assists Discover with conversion of text files by stripping out control codes, etc. 256k ram min.

**CONVERT-PCX** £10.00  
Used with Discover, allows transfer of bit mapped PC clipart graphics in PCX format (a common PC file format) to QL screens or Page Designer pages. Create more clipart easily for the QL! 256k ram, disk only.

**QL-PC FILE SERVER** £24.50  
Link a PC and a QL via a serial port cable and use this software to enable the two to communicate - the QL can save its files on a PC's disk systems and print to the PC's serial port using normal basic commands like COPY. Works on unexpanded QL.

**BANTER** £25.00  
Simple to use banner maker which uses outline fonts for good quality large text. Prints sideways across up to 4 sheets of paper. Simple to use on screen preview, etc. Suited most Epson compatible printers.

**IMAGE PROCESSOR 2** £15.00  
Easy to use graphics system, featuring usual graphics facilities, pixel zoom editing, image enhancement, mode conversion etc. 312k, disk only.

**SCREEN COMPRESSION** £10.00  
Reduce the amount of storage required by graphics on disk or microdrive. 256k, disk only.

**SCREEN DAZZLER** £15.00  
Unlike the usual screen savers, which simply turn off the display when the keyboard is not used for a while, this one can activate various graphical displays, more like the screen savers on other computers. Now with extra disk of display routines! Pointer environment compatible.

**SCANNED CLIPART 1** £10.00  
A 3 disk set full of compressed scanned pictures (decompression program supplied of course) which can be used in most QL programs (DTP, graphics, etc). Assorted collection, containing many pictures you may not find in other collections. A bargain at this price. 128k, disk only.

**PRINTERMASTER** £20.00  
Select printer control codes quickly and simply from a menu to set fonts, page lengths, etc before printing from programs like Quill, etc. 128k, disk/mdrv

**SQUIDGY ROUND THE WORLD** £12.50  
An arcade game, ideal for the young at heart! 128k

**5-GAMES PACK** £12.50  
5 thinking games in one bargain pack. 128k

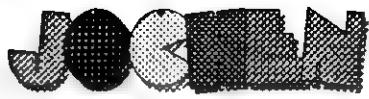
**OPEN GOLF** £12.50  
Golf playing simulation, with choice of 50 courses each of 18 holes. 384k memory required, best used with a colour monitor. Disk only.

**GRAY WOLF** £12.50  
Submarine warfare simulation, where you are the commander of a submarine in the Atlantic, an exercise in strategy for entertainment purposes. 384k RAM, 85 column monitor required. Disk only.

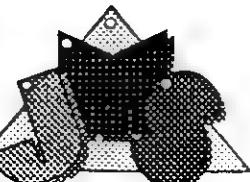
## SUPPLIES

FLOPPY DISKS	£0.40
DSHD DISKS	£0.70
MICRODRIVES	£2.50
DISK LABELS	£2.00
On printer roll	£2.50
ADDRESS LABELS	£2.00
MDV LABELS	£2.00
MOUSE MATS	£2.50
Disk box dividers in stock once more!	£3.00

**TERMS:** Discounts - buy 2 programs, claim 5% off each, buy 3 or more, claim 10% off each program. Offer applies to software only. **POSTAGE** - Software is sent post free in UK addresses. Overseas please add £1.00 per program for postage (maximum £3.00). Floppy disks and serial mouse - add postage of £1.50. Labels/mouse cash (send by registered post), or by credit card (Visa/ Access/ Mastercard/ Eurocard/ Connect). In case of difficulty contact us first to arrange a payment method if prefers it that way!). If total order value is less than £5.00, add £1.00 to total or we'll make a loss due to high bank charges.



# MERZ SOFTWARE



**Jochen Merz Software • Im stillen Winkel 12  
47169 Duisburg • Germany • Tel./Fax: 0203-501274**

Dear QL-User, this page gives you an overview of our products. Of course, a complete list would not fit. If you require more information, send a postcard or call. **All prices in DM!**

QD 5 - QL-Editor [V5.14]	125,-
QD 5 - Upgrade from V4 with new manual	25,90
QSpread - Spreadsheet [V1.21]	169,-
QSpread - Update with new manual	16,-
QMenu [V4.12]	39,90
QMenu - Update with new manual	16,-
QPAC I [V1.05]	61,50
QPAC II [V1.28]	142,50
QTYP II [V2.13]	82,50
RFI - Filefinder [V1.17]	49,90
Thing & EPROM Manager II [V2.16]	61,50
QDOS Reference Manual	89,90
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E-link - Update with new manual	16,-
QL-Emulators for ATARI ST (Brochure)	13,-

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## SER Mouse

SER Mouse is a software driver which allows you to connect a cheap serial (PC) mouse to one of the serial ports of the QL (the manual tells you how to mate up a connector). This mouse mimics exactly the QIMI, but for a much lower price! In addition, if you have a three-button mouse (and most of them have three buttons) then you have some additional functions: the centre button is ESC, left+centre is Wake and right+centre is Sleep. If you get a cheap mouse, the costs are 1/2 the costs of a QIMI mouse package - and you don't have to open the QL. Now Hermes-compatible!

SER Mouse software driver DM 40,-

SER Mouse complete incl. Mouse DM 87,-

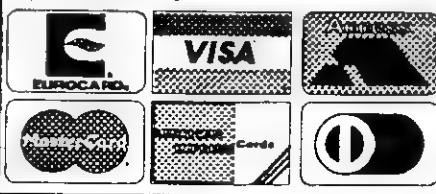
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QL World magazine 11,12:1988 / 1,4,4,5,6,8,9,10,11,12: 1989 / 1,2,2,3,4,5,5,6,7,7,8,9,10,11:1990 1,2:1991	each DM 4,- 5 or more each DM 3,50

## TERMS OF PAYMENT

All prices in DM, incl. 15% VAT. For orders to non-EEC countries, deduct 15%. All programs need 512k RAM minimum. Programs come on 3.5" DD disks.  
Wholesale postage & package depends on total value of goods:  
Europe: up to DM 50,- DM 9,-  
up to DM 500,- DM 15,-  
otherwise about 5% of the good's value  
Overseas: as above, but add DM 8,- per item  
6 months warranty on hardware. Specification and prices may change if necessary.



## QL-Emulator now for TT

The "QVME" QL-Emulator, which worked until now "only" in Mega STE's and (with adapter) in Mega ST's, runs now on the ATARI TT too! Of course, you get here all the same resolution up to 1024x900 pixels, and the machine is extremely fast (68030 running at 32MHz)! More information in the info which you can get from us.

## Harddisks for ATARI

Either completely cased for all STEs or STEs (with PSU, cables and adapter) or internal for Mega STE or TT. All disks are 3.5" from Quantum, very fast and with 256k Cache.

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Medium for SyQuest 44MB changeable harddisk DM 139,-

## UPDATES

Updates of our software are usually free. The exception: major changes on a program (a new Version number before the '.'). Send the master disk(s) to us, together with 4 international reply coupons for up to 5 discs or 8 IRC's for more. If a disk is faulty, add 1 IRC for a replacement. As the software changes from time to time, you may order a new manual together with the disc update. With upgrades, you automatically get a new manual.

## 3.5" Disks (with labels)

Pack of 10 DM 8,90  
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(Europe only)

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EPSON, Panasonic or similar DM 89,-

## QL Keyboard membranes

each DM 28,-  
2 for only DM 50,-  
as long as stocks last!

## News

### The Oracle - Brandnew Game! (by J.Merz)

Have a look at it - the new game for the Pointer Environment. The Oracle is an ancient tactic-puzzle, where you do not have to be fast but clever! You have to fill the tiles into the field, but there are various rules how to do it. If you place all the tiles you get bonus - if you obey special rules you can get much more points! The first person who solves the puzzle will be able to buy goods for free from Jochen Merz Software - the amount of the sum depends on the score! Every game is different, you'll never be bored! Other features: high-score table, hints for the next move etc. DM 49,90

### Minefield (by B.Scheffold)

A new Game for the Pointer Environment. It requires a lot of skill and concentration to mark an area of mines. Many options, configurable area size, number of mines etc. Requires Toolkit II. DM 39,90

### LineDesign

A real vector drawing package for the QL - of course, it is running under the Pointer Environment! All manipulations are without loss of precision, as everything is vector-based (and calculated in lines or bezier-curves). Objects may be resized by "dragging" the corners to the new size and may me magnified to any size required. Objects may be combined, filled and even rotated! You can zoom in and out and work in every view rate. Printer drivers for EPSON compatible dot matrix printers, HP Deskjet and HP Laserjet. You get together with the program ten disks of vector fonts and graphics (.dipart). You can produce real professional looking output! Lots of special effects. Even Adobe Illustrator files can be imported into LineDesign! DM 249,-

### HyperHELP for SuperBASIC

HyperHELP is a new helpsystem, which may be used "on its own", just for SuperBASIC, or integrated into QD (see description of Version 5). HyperHELP for SuperBASIC is very easy to use. If you need help, pop up a button (or execute it from file or Thing) and you will see a list of all the keywords, procedures and functions installed in your system. Select one of the items and you will get comprehensive help on the subject, with a listing of all the parameters and even examples - for the complete SuperBASIC! Some 100 kilobytes of English and German help are supplied. You can extend HyperHELP very easily yourself, all you need is a text editor or Quill. You can edit the text, add own remarks and examples etc. The other products from Jochen Merz Software will have help texts in the future, so if you buy a software package you will automatically get the help texts and you can incorporate them into the HyperHELP. DM 49,- If you wish to upgrade to QD5 later, you get a discount of DM 25,- when you buy QD5!

One of the most used software applications in the world is a database. Everybody needs a database, to keep track of your CD collection, books, or maybe to perform stock control and know what is ordered and by whom.

In the QL world there are only a few databases available. There is the well known Archive which was free, quite powerful and most of all SLOW. There is also FlashBack, which is very fast, quite flexible, but can't be programmed. These packages have a major disadvantage as they are no longer in development. So if something is wrong, or just impossible, then there is nothing that can be done about it.

On the other hand there is DATAdesign. DATAdesign is fast, flexible, safe, userfriendly and powerful. Fields can have any length, and any type of information in it. Files can be memory based (for speed), or disk based for security. If your file is disk based and there is a power failure (or your kid resets the computer), then at most one record will be lost. At any moment you can always add or delete fields, allowing you to easily expand your database. Or you can rename a field to make the name more obvious (or not). Naturally, you can also sort your database, or select which records should be visible.

DATAdesign also allows easy communication with other software. Any other package can directly access your database files if the author has made the provisions for it. If not, records can be passed from DATAdesign to another application by using the Scrap (e.g. QD), or the Hotkey buffer.

Naturally, DATAdesign uses the Pointer Environment. Thus DATAdesign is more userfriendly and the window can be moved, resized or put in the button frame.

For the more technically minded, DATAdesign can also be programmed. The Application Programming Interface (API) allows you to access, create and manipulate your file using the language you already know and love. We have provided an interface for C, SuperBASIC and Assembler. By writing your own applications which use the DATAdesign engine (DDE), you can write even more powerful software as the DDE gives you the possibility to create fully relational database systems. You suddenly get access to an infinite number of indexes which give very fast access. Also several jobs can have access to the same file,...

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# QPAC2 VERSION NUMBERS

Bangor, Gwynedd, GREAT BRITAIN - Dilwyn Jones

I keep getting asked about the differences in more recent versions of QPAC2, so here is a list of changes, abbreviated from extensive notes I received from Tony Tebby.

- V1.01 Columns re-organised.
- V1.02 Sleep always available on keystroke.
- V1.03 First complete version.
- V1.04 Release version.
- V1.05 Files V1.03: COPY/VIEW/ALL files fixed.
- V1.06 German version. Files V1.04 9ALL, Stuff filename) Sysdef V1.02 (Make\_dir).
- V1.07 French Version. Files V1.05 (sort problems, file retry).
- V1.08 First German release version.
- V1.09 Revised German/French. Config no sort, tree and statistics. Channels V1.02 no longer fails on open directory. List out of memory error corrected (usually files tree).
- V1.10 Files V1.06 version check removed from Update and Backup. Extension ignored in directory name. 2D directory selection.
- V1.11 Lower case Things selectable by keystroke in Things, Exec, etc. Occasional transient borders suppressed. Button Sleep V1.03 is much safer on force removing Jobs. Files V1.07 (files > 16k bytes to printer). Does not try to copy files to themselves. Can Execute files from MDV. Rjob V1.02 can remove itself. Sysdef V1.03 Make Directory removes failed directory file.
- V1.12 Parameter handling introduced.
- V1.13 Sysdef V1.04 fixes initialisation problem in QPAC2 V1.12
- V1.14 Files V1.08, fixed job name allowed.
- V1.15 Size allowed up to screen size.
- V1.16 Files V1.09 Sort also sorts status of items. Zero length files can be copied.
- V1.17 Monochrome mode.
- V1.18 Bpick V1.02 picks jobs with priority 126 as well as 1. Buttons and sleeping jobs are priority 126.
- V1.19 Files V1.10 uses FileInfo Thing.
- V1.20 Files V1.11 improved error recovery in FileInfo Thing
- V1.21 Files V1.12 FileInfo type 4 used. Files V1.13 file error recovery error corrected.
- V1.22 Files V1.14 directory control from main menu.
- V1.23 Files V1.15 can Execute from Microdrive.
- V1.24 Files V1.16 count of files selected corrected. Allocation in button frame is optionally temporary.
- V1.25 Files V1.17 does not reference \$4 if DO on empty space.
- V1.26 Button Sleep V1.04 correction for some versions of PTR: could smash heap on wake.
- V1.27 Files V1.08 allows multiple as well as negative sorts on command line.
- V1.28 Jobs 1.02 slightly improved.

## QPAC2 VERSIONS - (CONT'D)

### FILES MENU VERSIONS

- V1.01 Resident version.
- V1.02 Menus tidied.
- V1.03 Copy All with LBYTES and View now OK.
- V1.04 Error during ALL moves on to next item fixed. Stuff filename on select.
- V1.05 If there is a file error, it moves on to the next file. If dest exists, and user does not request overwrite, it retries file. Error in renaming with destination existing fixed. Sort by name corrected. Unsorted file list allowed. Suppression of single file operation confirmation. Increased allocation of data space for guardian windows. (Error DOing command no files selected first time (V1.04 only) fixed.)
- V1.06 File version no longer checked on BACKUP or UPDATE. Tree directories ignore extension. 2D directory menu.
- V1.07 Copying files >16 kbytes to non filing system device is now OK. Does not now copy a file to itself. Can now execute programs from Microdrive.
- V1.08 Now allows fixed Job name.
- V1.09 Sort also sorts available/unavailable status of items. Zero length files can be copied.
- V1.10 Interface to W. Lenerz FileInfo Thing.
- V1.11 Improved FileInfo error recovery.
- V1.12 FileInfo type 4 used.
- V1.13 File error recovery error corrected.
- V1.14 Automatic directory up/down from main menu.
- V1.15 Can execute files from Microdrive.
- V1.16 Count of files selected corrected (could be wrong from V1.14).
- V1.17 DO on empty part of menu (one file selected) does not reference \$4.
- V1.18 -ve sort specified in command line corrected - multi sorts possible.

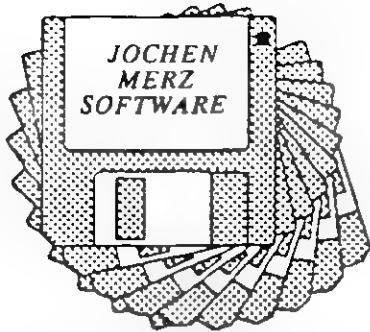
## SHAREWARE Foto-DBase

Torreblanca del Sol, Fuengirola, SPAIN - Salvadore Merino

Foto-DBase is a database of people with digitised photo. It requires a QL with at least 256 kbytes of RAM, and you can 'graphics Dump' to Epson and compatible printers (9 or 24 pin). Foto-DBase is not a commercial offering, I'm distributing it as Shareware. Official registration cost \$10.00 US and includes the source code (C68) and FREE technical support. For a sample copy contact me direct at:

Salvadore Merino  
Ctra. Cadiz, Ceramicas Mary  
29640 Torreblanca del Sol  
Fuengirola (Malaga)  
Spain

or you can send a FORMATTED 3.5" disk and a stamped self-addressed envelope to IQLR (please be sure the postage on the envelope will cover the cost of returning the disk).



# THE ORACLE

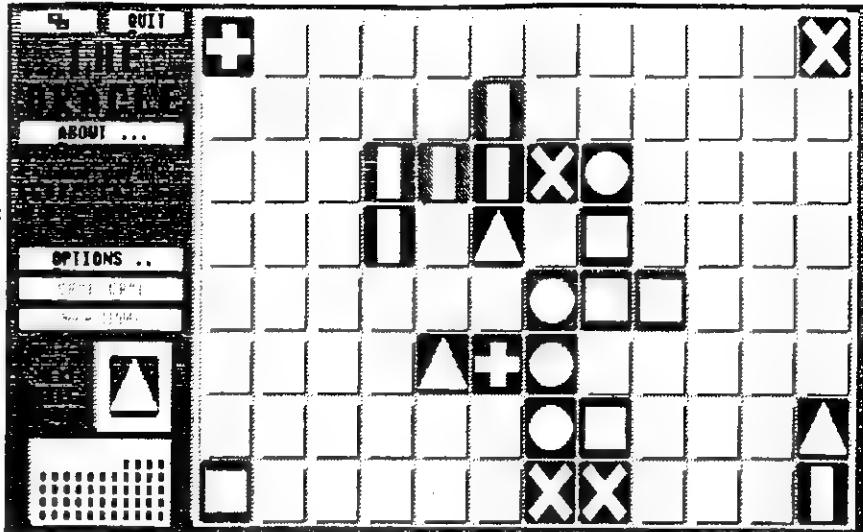
Shelby Township, Michigan, USA - John J. Impellizzeri

The Oracle is a pointer environment game for the QL that requires cleverness and cunning to solve an ancient puzzle. Itchy trigger fingers and fast reflexes are not needed. The object of the game is to set 72 tiles of various colors and containing different symbols on a playing board consisting of 96 squares while making as many matches as you can. When placing a tile, it must match the color or symbol of an adjacent tile. This seems easy at first but as you continue playing eventually you will have to set a tile next to two, three or four adjacent tiles. This is where the cleverness comes in as the same rules about matching color or symbol apply to all adjacent tiles. It becomes very challenging trying to make your moves such that a tile can be set and meet the rules on matching its neighbors.

Points are awarded for every legal match except for a match in the outer edge of the playing board. Higher points are scored for making the more difficult matches. One and two way matches are easy to make compared to a three or four way match which require much more thought. A high score table is kept on the disk and displayed whenever a new game is started.

There are options available to help you play by showing the possible places to set the next tile that will result in a legal match. You can choose either to show only the next move or leave the help on for the whole game. Using either of these two options will prohibit you from making the high score table however. It is helpful for first time players to see the possible ways to set a tile.

The Oracle will give you hints on solving the puzzle if you manage to make a four way match. There is a contest for the first one to solve the puzzle. If you should solve the puzzle you are told a secret code and are requested to write it down on the included form and return it to Jochen Merz Software to claim your prize. The prize varies depending on your score. The contest ends December 31, 1993.



The game makes good use of the QL's stippling to create the different colored tiles. The graphics are very good considering the QL's limited graphics capability. You can play the game using the cursor keys and space bar but since it is a pointer environment program it is well suited to a mouse. Using a mouse makes playing the game much more

## THE ORACLE - (CONT'D)

comfortable. One item to note: I found that (on my system at least) that Oracle didn't like Lightning. The game would start to run and hang the QL. By simply turning Lightning off (using '\_IngOFF') and then loading the game everything worked fine.

The Oracle is a very challenging and addicting game for the QL. It comes with an incentive to try and solve the puzzle so you can win a prize. The game makes excellent use of the pointer environment and the QL's graphics facilities. Good luck trying to solve the puzzle! (I have yet to...)

## THE QL in NORWAY: N.A.S.A.

Ølen, NORWAY - Pål Monstad

Have you ever heard of Norway? If your answer is no, please take a look at a map. You will find Norway to the northeast of the British Isles. By the way, there are no ice bears in the streets as far as I know! As you can see, Norway is a very small country, with a population of only 4.2 million. We have about 20-25 people who own and use a QL or compatible computer. N.A.S.A. has 50 members, including some from Denmark and Sweden.

N.A.S.A., in the first beginning was known as QLUB of Norway and was formed back in 1988. Back then there were more than 100 readers of our publication: Sinclair Magazine. Over the years, we as many other groups, have had our defections but we remain a smaller but vibrant group. Sinclair Magazine is now published 4 times per year, containing 24 A5 pages of QL related articles, reviews etc.

The founder of N.A.S.A. (Qclub of Norway) in 1988 was Arild Reiten. He closed down the business in late 1989, and asked if I could take over. I said yes, and have been the QL man in Norway since then. My name is Pål Monstad (often known as P. Monstad, because of the unprintable Scandinavian letter). I am a 21 years old student, living at the south west coast of Norway.

I bought my first QL in September 1986, and have since owned several QLs, a Thor, and now two Atari Mega computers with QL-Emulator fitted. I must confess that I was ready to give up the QL because of several lockups in 1987. Instead, I bought a new QL together with disk station and SuperQboard. That system was good, and served me for the next several years. I then got a good offer for a second hand Thor 1. I bought that machine, but found that QRAM was quite incompatible on the Thor, the same could be said about Turbo. I went back to my old QL and started to develop small programs in SuperBASIC. QRAM was used extensively together with the Psion suite. My life changed totally (not exactly) when I got Qliberator. This marvellous compiler was capable to compile my badly written programs. Sorry Turbo, you weren't.

As some of you probably know, the QL Emulator for the Atari was originally developed by Futura Datasenter here in Ølen. Futura made the emulator because they wanted to use it for their communication system. This communication system was a big success. The Norwegian and the Danish prime minister (together with many other people and companies) had one of these machines at their offices. But Futura moved the whole system over to the PC...

## THE QL in NORWAY - (CONT'D)

Futura Datasenter is located in my neighbourhood, so I did see the emulator quite often, but couldn't afford it. Futura gave the emulator to Jochen Merz when they "gave it up". Jochen, in conjunction with Tony Tebby, has made the Emulator a lot better than the original. The original emulator was more or less exactly the same as a QL, while the "new" one has greater screen resolution, mouse and harddisk support etc. etc.

In April 1991 I bought the rest of the original emulator cards from Futura Datasenter (had to solder them myself), and I made a couple for myself (of course). My main machine is now an Atari Mega ST4 with 52Mb harddisk, a laser printer, colour monitor etc. I find this system very powerful, especially when compared to modern MS-DOS computers. The PC has got lots of nice colours on screen, nice Windows programs and sound. But why use a PC when I can do most and more the on my QDOS system? I use my QL (Atari-QL) to write letters like this, with Text87 Plus 4. The best wordprocessor I have used, also compared to Word and WordPerfect. All my desktop publishing work is done on my Atari (two machines in one) with Calamus, an extremely powerful DTP program. The QL hasn't a DTP program to match Calamus, sorry!

I use my QL mainly because of its unique multitasking and its powerful SuperBASIC. The Pointer Environment is very good. I can't understand all those Englishmen who write in Quanta and QL World just to tell us that they don't understand it, or they can't see the meaning of it. They must be extremely old fashioned. Look at the Germans!

All I can tell them is: Go and buy a Gold Card (or even better: a QL Emulator) together with a mouse, and then the important part: the Pointer Environment. It is not an easy job to get to grips with, thanks to the poor documentation, but don't give it up! PS! Don't forget to buy a disk station, they are really powerful compared to microdrives!

I will continue by telling you something about NASA Computing. NASA Computing is a very small QL software house. We have written Index Optimum and Disk Mate 4. To be honest: I don't think many of you have heard of these programs . Then why not? The programs are completely new (old versions have been around for a while). We have put a lot of work into these two programs which will be ready for release when you read this.

Both programs run under the Pointer Environment (of course), thanks to the EasyPTR software by Albin Hessler in Germany. Albin has made one of the best programming tools for the QL ever.

If you want to know more about Index Optimum and Disk Mate 4, please send 4 IRC to us together with a 3.5" disc. We will then return demo versions of our programs to you, together with further information.

I hope you all have found this article informative. Some of you will probably meet me and other members of N.A.S.A. at the next QL Show in Germany in the spring of 1994. We are looking forward to hearing from you! You can reach us concerning the software or information about the club at:

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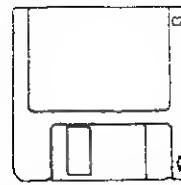
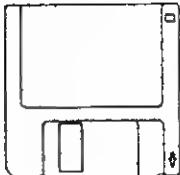
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# Ergon Development

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Davide Santachiara, Via Emilio De Marchi 2, 42100 Reggio Emilia, Italy

**ZX Spectrum emulators:** Watch these specifications...

- **ZM/ACCESSORIES:** BACKUPERS: ZX & QL software to transfer ZX programs through network/serial port provided you own an Interface-1; ZM/DISK UTILITIES: conversion utilities for Plus-D, Disciple - 48k & 128k snapshot - Opus Discovery disks; ZM/DIGINET: direct ZX tape reading through network port, no Interface needed - **NEW LASER PRINTED MANUAL:** The manual refers to ZM/2, ZM/3, ZM/hT and ZM/128 and is now roughly 100 A4 pages! - **COMMON FEATURES** of our emulators (even ZM/2 and ZM/3 now has been upgraded at ZM/hT level): Z80 snapshot load/save (v1 or v2), Z80 monitor, true ZX sound, true tape emulation (EAR & MIC port emulation), ZXQL tapefile management on your fast QL devices... (support of headerless files, LOAD = works...) : three keyboard modes: Standard, Game, Multikey - Support of Kempston, Cursor, Sinclair joysticks - direct file transfer with Interface-1; configurer (eg. for hard-disk users)
- **ZM/2 NEW PLUS 3 release:** standard 48k emulator - compatibility >99% - Spectrum speed on a 16 MHz Gold Card: 30/50% - Interface 1 emulation - **ZM/3 NEW PLUS 3 release:** threaded code compiler - compatibility >60%, speed 50/80% - ZM/128 Spectrum 48k / 128k emulator (+2) ; Interface 1 emulation - You can change the emulated hardware at runtime. Amazingly speed in 128k mode is similar (though slightly slower) than in 48k mode thanks to a very clever 16k memory bank switching implementation. FOR I=1 TO 200:PRINT L;"::NEXT I is performed in 13s on a 16 MHz Gold Card - AY 3-8912 soundchip emulation through the QL beeper! **ZM/hT NEW PLUS 1 release:** The Advanced Spectrum 48k emulator. Now with AY-3-8912 soundchip emulation (many 48k games use the 3 channel sound-chip of the +2: Plotting, Enduro Racer, Pro-Tennis...). ZM/hT is surely one of the finest program ever written on any micro: it converts dynamically Z80 code into fast 68000 machine code! The speed is 70/130% Spectrum speed on a 16 MHz Gold Card (20/40% on Trump Card). Compatibility amazingly is >98% (all games we tested run). Reviewers said about the ZM/hT system: "... really spectacular ... Ergon have made a highly professional product, well worth the price" IQRL Vol 3 n.1 "ZM/hT is very fast ... well worth the extra cost... an incredible feat of computer science" Simon Goodwin QL World April 93. **NEW ZM/128 & ZM/hT Public Domain versions:** Full working but with some menus disabled (these versions are also included in the Ergon demo disk)

... And choose your package ... (You can upgrade at any time simply sending the difference in price between the two packages!)

- **BARGAIN** ZM/128 & ZM/hT PD versions + laser printed manual + ZM/Accessories. **Price 40000 ITL**
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**NEW Ergon Floppy disk utilities:** Many useful tools for DD (720 Kb), HD (1.44 Mb) and ED (3.2 Mb) QL or alien disks. You get 1) a fast and powerful DISK EDITOR with many functions: Search, Edit, Collect, Recover corrupted files (even if the directory and/or sector map is corrupted) - 2) An Intelligent disk copier/verifier which can work even with a single disk drive system (single or multiple copies are allowed) - 3) Format disks with extra 5% capacity 5) Much more... A tutorial is included. **Ergon FLP disk utilities costs only 35000 ITL**

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**QLibrary Manager:** Not a simple library manager but a clever SuperBasic source code extractor/manipulator. Do you need a routine from a SuperBasic program written some time ago? QLM will extract it for you. Just tell him what you need. Very powerful and professional. **QLM costs 40.000 ITL** with manual and new tutorial. "Overall the package is useful for SB authors and should enable new Basic programs to be created quickly, using experience and routines already created for earlier programs..." QLWorld 8/91

**DEAssembler v5 plus-3:** **NEW INTERACTIVE VERSION.** DEA usually disassembles >95% of any program without user intervention, saving you HOURS of manual work! It can extract AUTOMATICALLY Toolkit commands ready to be re-assembled. Multi data-types are recognised with automatic selection, providing auto-recognition of SB extensions, ROM headers, strings, QDOS - SMS - PE - WMAN calls, Config tables and Things extensions. DEA has knowledge of the structure of parameters passed to the most important o/s calls. This improves the degree of automatic decoding, and makes generated source code quality and readability really impressive. Calls to the o/s (QDOS/SMS/PE...) and error/system-basic variables keys are reported (QDOS/SMS notation). The output is 100% compatible with GST/QMAC, METACOMCO, HISOCO assemblers. **DEA costs 55.000 ITL** with new 54 pages manual and tutorial. QL World 4/92 said about v4: "This program is certainly the most versatile machine code programming utility I have seen on any computer to date".

**Open World:** (V2.1) Graphic conversion utilities. Load into the QL GIF files (present in enormous quantity in all of the BBS), TIF (scanners), IFF (Amiga) or CUT Images of any dimension. Convert them into 4, 8 colours (grey levels) or monochrome QL Images (with a powerful dithering algorithm - great for DTP applications). **Open World costs 35.000 ITL** and is supplied on two disks with some beautiful images, a QL to PC screen converter (file saved as GIF) and a program to read QL disks on MS-DOS v5, SUN, VAX, UNIX...

**MusicManager:** (V1.2) Simple program to create and play music on the QL Psion style operation. **It costs only 20.000 ITL** with 8 pages manual. "If you want to produce something of a semblance of music on the QL, then this is a useful package" QLWorld 6/91

Please add 5.000 ITL for airmail postage (Europe) & packaging (add 3000 ITL per program ordered for airmail p&p outside Europe). Acceptable forms of payment are: Eurocheque in ITL; Postal order in ITL (send a copy of the receipt); Foreign currency cheques: use current conversion rates (ask your bank - 1000 ITL are roughly 0.62 US\$, 0.425£, 1.05 DM). Cheque payable to D.Santachiara. Direct bank transfer to: Banca Popolare Dell'Emilia SWIFT BPMOT22 Sede Reggio E. CC 6533/73 D.Santachiara. **To receive our disk with PD or demo version of our programs send 6 IRCs. This disk is really worth having:** It contains over 1.5Mb of data in compressed form: the new August '93 release contains PD versions of DEAssembler +3, QLibraryManager, F-Disk-Utilities, Open World, MasterBaSic, ZM/hT and ZM/128! All of our programs (except MusicManager) need 512Kb expansion and are based on a QPac 2-style menu system.

They are fully compatible with Minerva and the P.E. They are written with clear English messages and the manuals have been improved in the UK. When ordering please state your system configuration.



# EDITOR SE (PART 1)

Massapequa, New York, USA - Bob Gilder

*Editor Special Edition is one of those rare packages where a review alone would not do it justice. This being the first of at least a four part series, Bob will attempt to give us a total view of Editor SE, including an Overview, a Tutorial, and some additional Ramblings for good measure.*

*Editor SE authored by Charles Dillon, is one of the mainstays in Digital Precision's stable of substantial software packages for the QL. For pricing and ordering information, please note their adverts elsewhere in this issue.*

My affiliation with The Editor and Editor SE started in 1987. I had heard so much about this terrific program as being an excellent file and text editor - and yes, a word processor too. From several QL users in my local Timex/Sinclair computer club (LIST), I was advised that this was a program which required too much time to get a 'handle on', so they just gave it up. That was just the challenge that I needed!

I have found that learning to use a new computer program - or operate a computer - learning to fly an airplane or any other new activity usually takes an awful lot of dedication for an individual to learn something new, which will eventually be worthwhile in his or her life. I felt that this program was worth that kind of dedication, and it was...well worth the effort! The Editor SE has been my constant computing companion since I first booted the program up.

Editor SE is the only program I have which is in use daily, preparing all sorts of documentation - primarily, technical manuals ranging from 20 pages up to 175 pages in length for the Airline Entertainment industry. All pages are printed back-to-back (page 2 behind page 1 and so on) and some manuals have pages in double column format - an easy task for Editor once you know how to make use of this program!

The Editor allows embedding of any printer control codes necessary for me to produce outstanding manuals. Even though The Editor can be used as a Word Processor (it has many word processing commands and printer drivers provided), I prefer to embed all necessary control characters manually as I proof-read my document.

I was extremely happy when it was brought to my attention that The Editor SE had been recently upgraded so I naturally acquired the upgrade. The upgraded version still indicates Version 2.05 and the manual reflects minor changes. However, the accompanying 'UPDATES text file, when printed out becomes an extension to the well detailed, 150 page manual. The UPDATES file indicates that the XTRAS file contains all additional upgrades or 'bells and whistles' for the program commands.

My original XTRAS file has 5K,598 bytes while the new version of the XTRAS file indicates it is 7K,268 bytes in length. If you are interested in upgrading your Editor SE program, first check the byte count of your XTRAS file and the contact Digital Precision for details of the upgrade.

## EDITOR S/E Part 1 - (CONT'D)

What makes The Editor so powerful? Many items such as the use of Command files, which can work for you while you are doing something else; window re-sizing allowing two copies (or more) of Editor to be displayed on the monitor screen at the same time; The special EDT Charset, providing on-screen representation of characters CHR\$(0) through CHR\$(31); Three different types of Block commands - Line, Column and Block including commands to highlight a block, write a block to a file, insert or move a block anywhere on screen or delete a block; swift paging through the files using the combination of ALT-SHIFT and with either up or down cursor keys; The ability to display almost any QL file imaginable, the lightning fast and powerful Find and Exchange commands and many more features which are too numerous to detail at this time. The manual accompanying the Editor program is well written and fairly easy to understand. However, just like any technical manual, it takes several readings to 'get the drift' of things.

Using command (-cmd) files allows the user to sit back let Editor do much of the 'donkey' work for you when editing, formatting and deleting those nasty control characters from, say, a \_doc file in Editor's memory. Cmd files can also be used to embed printer control characters in a document, they can re-format pages of text into narrow columns of text, block off a 60-line segment of that text and insert it next to the previous 60-lines of text for a double column page. I use several command files for this - one for 10-characters per inch, another for 12 characters per inch. If the user wishes, 15, 17 and 20 characters per inch can also be achieved in the same way by embedding the proper printer control characters within the command file.

The Editor SE provides four command files on the disk - Boot cmd, Demo cmd, Quill cmd and Column cmd. The Boot cmd file is activated just before The Editor is initialized and it is advised that any new user of Editor should load this file into Editor itself and make any necessary changes to this file, such as, Window colors, margin settings, tab settings, memory allocation and any other such additions or deletions which will make your computing life easier within the Editor atmosphere.

Demo cmd exhibits some of the features of Editor providing the user with ideas of how and what \_cmd files can do for you.

The Quill cmd file provides a demonstration of how a command file can re-format a \_doc file. Use the RU command (Read Un-formatted) when reading in a \_doc file, however, be careful because this automatically places the program in the over-write mode and without knowing this you may over-write something important! Pressing F5 places Editor back into the Insert mode. The file will display 255 characters across the screen and display those 'wild', what-are-they-for characters.

Read in the QUILL cmd file after a \_doc file has been loaded into Editor's memory. Enter F3; and on the command line type 'RC. Quill cmd' (RC = 'READ CMD file'). Within seconds the \_cmd file will begin the task at re-formatting the \_doc file to an almost clean text file. There may be some additional editing for you to do afterwards, however, the 'heavy work' has been done for you by The Editor.

COLUMN cmd should be RC'd into Editor without any file present in memory. Again, as with the Quill cmd file, press F3, type in 'RC.COLUMN cmd'. The command file

## EDITOR S/E Part 1 - (CONT'D)

will generate some data and then format the data into three columns.

Note: In the above paragraphs I did not type in a device name, such as 'flp2'. That is because flp2 is the default device I use for reading or writing to and from files. Editor will assume that the file is on the default data drive.

The Boot file of the Upgraded version has changed. There are three LIGHTNING extensions added to it - LNG\_TEXT\_EXT, LNG\_GRAF\_EXT and LNG\_MATH\_EXT, providing increased speed where it would apply. With a Miracle GOLDCARD supporting the QL while Editor is up and running (at 16 Mhz), I find that I have all the speed that I need. In fact, when I use a cmd\_file which I developed to change the date structure of a disk directory, it is difficult to follow the sequences of change while Editor is operating at 16 Mhz. I must CTRL/C into SuperBASIC and enter the command SLUG 10, to slow down the cmd\_file process.

A new file has been added to The Editor SE disk - Quill to Ed, which is an EXecutable file. This program strips all control codes from a Quill file in seconds, providing the user with a pure text file. When EXECd into memory, the program requests for the name of a doc file; then a new name for the text file. When the transformation from a doc to text file is completed, the program lists the time that it converted the doc file to a text file and then requests the name of another file to work on. Pressing ENTER exits the program. I tried this program on a four page doc file and it was completely converted within 3 seconds.

The Editor SE contains approximately 100 commands. During the course of the past six years of using The Editor, I doubt that I have actually accessed all of the commands. All Editor commands are displayed on the HELP file, which is comprised of five screens of information, and is easily accessible by pressing the F1 key. Paging through the HELP file is accomplished by pressing ENTER. Activitating the Escape key brings you back into the text mode again.

The Help file provides instant assistance when requested - All of the Editor commands are listed by groups such as file commands, block commands, find/exchange commands, cursor controls, General Information, command format, small and big movement commands, qualifiers, quit, marker, tabs, margins, justification, insert, delete, undo, renumber and sort, case adjustment, reformat, memory, documents, sundry and additional comments on command files. At the bottom of some of the Help screens are explanations pertaining to the asterisk (\*) character following some of the commands:

\* Number must follow \*\* String must follow \*? String optional  
\*, \* One or two numbers optional

Some examples: R\*\*: R.flp1\_My\_text, E\*?: E/my name/your name/ or

E\*?: E/my name// (change string for nul string)  
GL\*: GL 123, KM\*,: KM 1,5

The command KM sets the color for the main screen.

EDT\_CHARSET is a special character set which is very unique - it displays all

## EDITOR S/E Part 1 - (CONT'D)

unprintable ASCII characters from 0 to 31. CHR\$(0) is displayed as a 'high equal sign' and is normally labelled NUL; ESCAPE is displayed as an UP ARROW with a BAR on top (all characters from 1 to 31 will have this bar displayed). ESC is CHR\$(27). A more detailed listing of these special characters is explained in chapter 4.3, page 14 in the manual.

You may ask, 'What good are these special characters?' - well, if you load in, say, any Quill\_doc file using the RU command (Read Unformatted file), you will find these characters 'strewn all over the place', the screen is cluttered with them, distracting your attention from the text you wish to view.

Those special characters allow the user to embed printer control characters directly into a text file as I do when I proof read my file. How do you know what each of these characters represent? There are 26 characters in the alphabet, so - Control / A = CHR\$(1) and so on. However, there are some characters like 'C', when used with CTRL (CTRL/C is used for switching or multi-tasking) the user must press CTRL/SHIFT/C simultaneously for a 'C' with a bar on top, emulating CHR\$(3), EXT. Again check your manual for additional keying of special characters.

Note on CTRL-C control character: On page 14 of The Editor manual, Users are advised to enter CTRL-SHIFT-C to access the 'C with a bar on top'. Writing this document has been with the aid of an IBM keyboard and Keyboard 90 K/B interface. To print out the CTRL-C character, I must use the CTRL-ALT-C combination with K/B 90. Most probably, this is due to keyboard mapping, however I'm not sure! Try both combinations to find the correct sequence for your keyboard. By no means does this reflect badly on the manual, because I have accessed the CTRL-SHIFT-C and CTRL-ALT-C combinations with the Schoen keyboard interface and printed the correct character. The original QL keyboard will also print out the correct character with CTRL-SHIFT-C.

If you are a Quill user (sorry Freddy!), Load in Quill; press F4 and select B for bold type in a few words then escape out of bold print. Press F4 again, select underline and again type in some words then escape from underline and repeat with Low and High script.

On the next line press the £ character (usually translate 1) and if you have additional translates set up, write a few words using each if them. When you have completed this file, press 'P' and ENTER twice and then overwrite 'printer' with something like 'flp2 TEST'. Quill will look for the printer\_dat file on flp1\_ (make sure that it is on the Quill disk!) to look up the translates so that it will print all control characters within your text file (with a \_lis extension) that you have created.

In EDITOR, load in the 'Test\_lis' file with F3, R.TEST\_lis and your file will be displayed and on each line you will see different control characters displayed. BOLD print will be indicated by an UP ARROW with a BAR on top (ESC), followed by E (for an Epson or Epson compatible printer); UP ARROW F is at the end of the BOLD character line. All lines will terminate with a CTRL-M character.

For each of the following lines in your file there will be special characters appended before a line of text with starting with an UP ARROW, and at end of the words, starting with an UP ARROW, which were used for this test. That is how I learned what those

## EDITOR S/E Part 1 - (CONT'D)

strange characters meant and how to embed printer control characters into an EDITOR text file!

What else can The Editor do? Before I purchased Digital Precision's Transfer Utility, I used The Editor to change translates (single words or strings) within the PSION 4 programs - such as mdv to flp; cartridge to diskette, colour to color, microdrive to disk drive and so on using the following command with one of the PSION programs (a backup copy, please!) had been Read into Editor:

F3, RP E/microdrive/disk drive /

Notice that that the words microdrive and disk drive each contain 10 characters. If you intend to change the word cartridge which has 9 characters in it to the word diskette which has 8 characters, you must add a space before or after the word diskette to avoid any trouble EXEC\_Wg the file after you write this file to your media. You must be certain that the file you are working on has the exact byte count as the original file.

Incidentally, you can also make changes to each of the PSION HELP files (those ending with \_hob). Any string change in a machine code program must have the exact number of replacement characters as the number of characters in the original string!

The above command starts off with the RP command. The reason for this is RP stands for Repeat Command and as there may be more than one occurrence for the word(s) requiring change. 'E' stands for Exchange strings. The first string nested between the two slashes is the search string and the second string after the second slash is the replacement string.

I had another use for a cmd file which had to do with a printer that dated back approximately 10 years; the ITOH 8510-A, Prowriter - also known by the name, Apple ImageWriter. This printer was used for printing files from a ZX80, '81, Spectrum and Timex 2068 computers without a hitch. When I tried to print out text files and SuperBasic listings from my QL, the printer would over-write the same line continuously. A Quill doc file would print out flawlessly. Even documents printed to a file (\_lis extension) would print out fine. If I re-set 2 switches on the printer, SuperBASIC listings and text files printed out correctly.

This really bothered me to the extent of adding a DPDT switch to the printer so that I could make full use of the printer with Quill and text files - but I really didn't like to do this because I knew there had to be another way to use that printer with all of the tasks I wanted that printer to do.

I activated The Editor, read in a text file with a "lis extension. Low and behold - there was the answer staring me right in my face. At the end of each line there was an M with a bar on top, CHR\$(13), a carriage return character.

Ridding the CTRL-M character wasn't a problem - I just entered a simple command on the command line - T RP E/CTRL-M// (CTRL-M indicates an M with a bar on top) and pressed Enter and eradication of the character had begun. Incidentally, pressing the left arrow key 5 - 6 times or more rapidly really speeds up the process as the screen

## EDITOR S/E Part 1 - (CONT'D)

stops refreshing. When the job is completed, Editor provides you with a message 'Search failed'.

Now I had to write a short command file to write a CTRL-M at the end of every line for several text files that I wanted to print out...and it is outlined as follows:

```
T RP CE E/ /CTRL-M/ N
```

Explanation; T start at Top of file (line 1, column 1); RP Repeat Command; CE Cursor to end of line; E/ /CTRL-M/ Exchange empty string with a CTRL-M character; N Next line. There it is. I still use this printer, however, only for printing out disk labels. This example indicates just how powerful The Editor is and just how useful command files and the EDT\_character set really is!

The above \_cmd file (or any other cmd file) can be executed from the command line; or from a line anywhere within your text, just place the cursor at the beginning of the line where the command is situated and then enter F3, EX (EX = Execute line under the cursor) then press ENTER, or it can be written onto media with the extension '\_cmd' and then read into editor with the RC command (RC = READ COMMAND file).

Earlier I mentioned that the Editor window could be changed in size so that two different copies of Editor could be displayed at one time. Why use two Editors on the same screen? When I proof-read my documentation, I sometimes start editing lines of text which do not seem to be saying just what I wanted it to say...so I start overwriting the text. Then, at times, I may loose my way in the edited text because I have changed the context of the expression - so I enter CTRL/C and read in the same file into the second Editor, enter GL (Go to Line number) line number of the line I am currently on and now I can read the original text, CTRL/C into the first Editor then press F4 to refresh the screen if necessary, and make the required adjustments to the text.

Earlier in this overlay, I had mentioned that I had to slow down a \_cmd file when it was activated with a GOLDCARD interface. Below is that file printout. For the users of The Editor Section 10 provides some good examples of how to use Editor's commands and the first example on page 96 of that manual started me on the road to develop the DRM\_cmd file.

From the Editor manual:

```
CTRL-C into SuperBASIC and enter the following line:  
OPEN_NEW #3, flp2_DIRprg: Dir #3, flp1_: CLOSE #3
```

The flp1\_directory will be copied to disk on flp2\_and when the file has completed, it will appear as the example below. Note that each file occupies two lines. The \_cmd file below the directory listing will automatically join the corresponding lines together, then the \_cmd program will change the date structure from yr, month, day to month, day, yr (this is how we write the date across-the-pond).

The BTK command is used and all blocks as they are moving about can be seen due to the BH command which appears in a complimentary color on the screen. This \_cmd file was really written just for demonstration purposes only to demonstrate how

## EDITOR S/E Part 1 - (CONT'D)

command files are written and how they can perform all sorts of tasks within Editor itself while you relax sipping your cup of coffee.

EDT_BOOT		A typical directory file produced with the DIRprg from SuperBasic.
EDT_BIN		The bottom file is the filename of the directory: DSKdr
EDT_CHARSET		
EDT_HELP		Below this file is the cmd_file, DRM_cmd
XTRAS		
BOOT_cmd		
QUILL		
QUILL_HOB		
R_KeyDef		
EDT_simple_PRdrv		
EO		
DIRprg		
DSKdr	in use	
si1;sl1;sr80 t rp 24cr j n t btk 48cr bs b 55cr be bh t 61cr bm		Note if using a GOLDCARD, CTRL/C into SuperBASIC and enter SLUG 10 to slow the process of changing the date from y,m,d to m,d,y using 17cl bs b 39cr be
t 48cr bi 12cl bd t 53cr bs b 60cr be t 50cr bi 8cr bs b 68cr be bd t		Invoke F3, RC.DRM_cmd and observe how The Editor SE can do some of your housekeeping chores for you.

The command file was written line-by-line and run after each consecutive line was added. This way, it is easier to ensure that the program does what it was intended to do.

Si1:sl1:sr80      Set the left, indent, and right margins

## EDITOR S/E Part 1 - (CONT'D)

t rp 24cr j n      Cursor to top of file, repeat command, move cursor 24 spaces to the right, join both lines, next line

t btk 48cr bs b 55cr be bh  
Cursor to top of file again, set block type to column, move cursor 48 spaces to right, and block start at current cursor position, goto bottom, move 55 spaces to right, block end, block hide (block will appear black on my screen)

t 61cr bm      Go to top of file, move cursor 61 spaces to right, block move - move block to cursor position

17 cl bs b 39cr be  
Move cursor 17 spaces to left, block start, go to bottom of file, move 39 spaces right, mark end of block at cursor position

t 48cr bi      Go to top of file again, move 48 spaces right, insert block at current cursor position

12cl bd      Move cursor 12 spaces left, block delete

t 53cr bs b 60cr be  
Go to top of file, move cursor 53 spaces right, mark block start, go to bottom of file, move 60 spaces right, block end at cursor position

t 50cr bi      Go to top of file, move cursor 50 spaces right, block insert at cursor position

8cr bs b 68cr be  
Move cursor 8 spaces right, mark block start, go to bottom, move cursor 68 spaces right, mark block end

bd t      Delete block and go to top of file

The line below this paragraph is an example of what the \_cmd file does. If you want to sort the whole file say, by name, set up a block and just place the cursor at the first letter of the disk filename and enter F3, SQ and all filenames will fall into alphabetical order. If you want to sort the time or year, again set up a block and place the cursor at the start of the number column you wish to sort and enter SQN.

EDT\_BOOT 147 Dec 01 1989 20:35:06  
EDT- 91540 Dec 01 1989 20:36:09

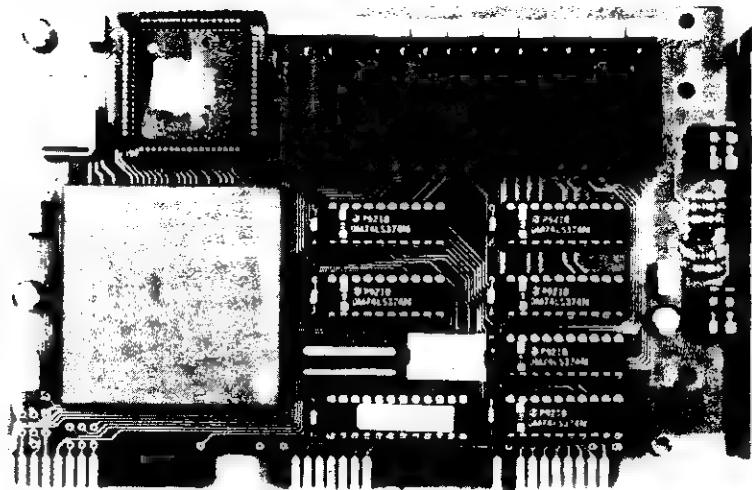
And below, is another command file that I place at the last line of my file to initialize the main screen color and the command screen color, set all three margins and tab settings.

km 7,1 kc 1,7 si6; sl6; sr 74 ta 6,10,14

In the next issue of IQLR I will discuss using the EDT\_charset and Printer Control characters within The Editor SE.

# MIRACLE

## THE QXL



The QXL turns the common PC into a QL compatible. The package comprises a half card that plugs into an 8 or 16 bit standard ISA slot and a diskette loaded with a QDOS compatible operating system and a SuperBasic compatible interpreter. After installation simply type QXL and the PC will appear to be a QL allowing QL programs to be run from QL format diskettes.

The card itself has a 32 bit 68EC040 processor running at 20MHz which gives a good turn of speed. This processor has access to its own RAM and so performance is virtually independent of the host PC whether it has an 8088 or a Pentium. In fact the PC is used purely as an I/O system giving QL programs access to the PC's floppy disk, hard disk, keyboard, display, serial and parallel ports. The card itself has QL style network ports to allow connection to a QL network. The minimum PC specification required is an XT with EGA display and a spare standard slot.

Varying RAM sizes from 1M up to 8M can be supplied. The smaller capacities can be upgraded to the larger ones and the cost is simply the price difference. Not all the RAM is available to the user programs; the 1M equates roughly with a TRUMP CARD QL memory size and the 2M with a GOLD CARD QL.

During the lifetime of the QXL we intend to enhance the software to make use of the new hardware facilities of the PC such as SVGA graphics. As has been our policy with the TRUMP CARD and GOLD CARD we intend to provide software upgrades free of charge.

# MIRACLE SYSTEMS

## QXL prices

1M	£295	(£255)
2M	£325	(£280)
5M	£410	(£355)
8M	£495	(£430)

(prices in brackets for outside EC)



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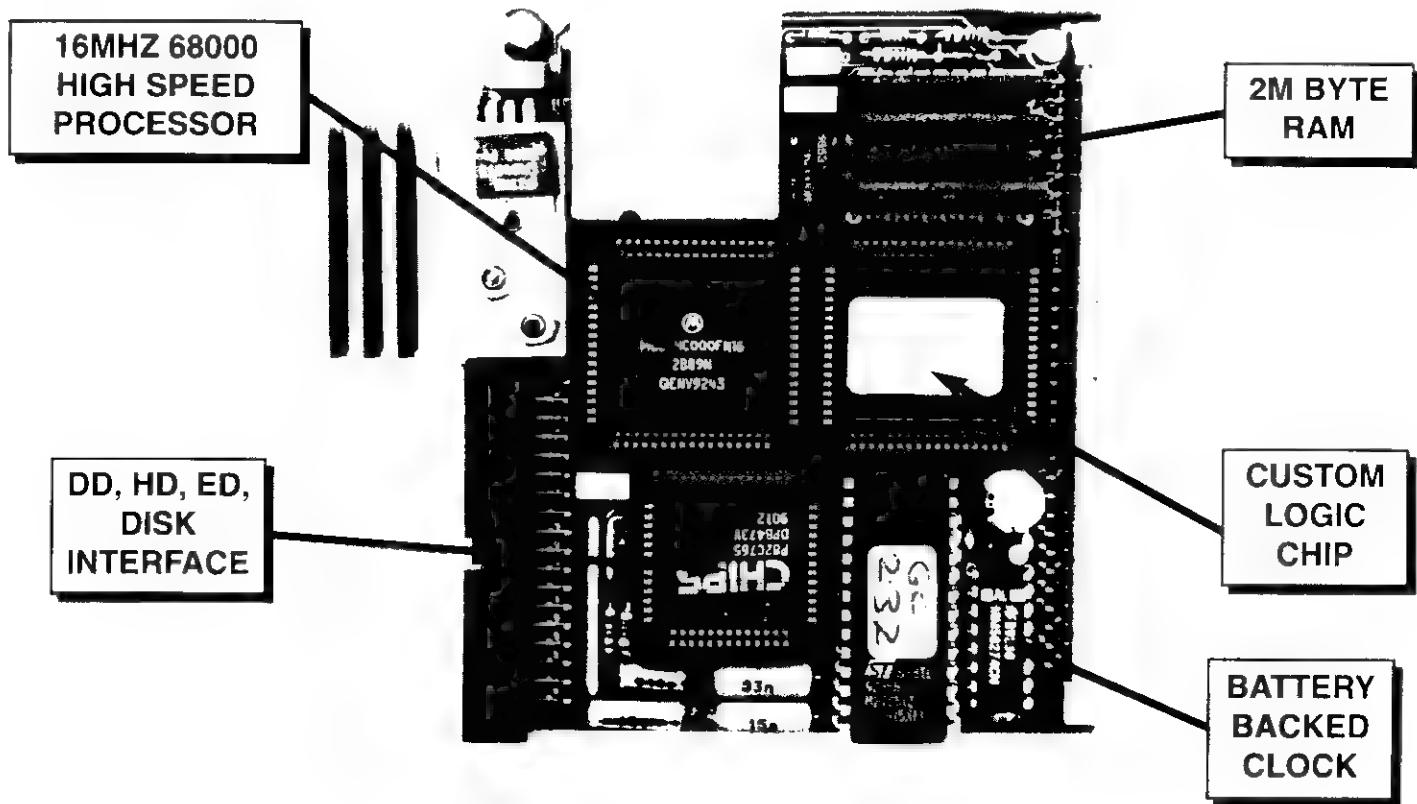
Expires  /

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Address \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

# MIRACLE SYSTEMS



## QL GOLD CARD

£225 inc. (£200 outside EC)

This is the expansion that has been revolutionising the QL. It is very easy to fit , it simply plugs into the expansion port at the left hand of the QL, and once fitted it will instantly increase the execution speed of the QL by about 4 times due to the presence of a 16MHz 68000 on board. There is 2M of fast 16 bit RAM of which QDOS sees a contiguous 1920K. The remainder is used for shadowing the QL's ROM and display memory and for the GOLD CARD's own code.

There is a disk interface which can access 3 mechanisms (4 with the DISK ADAPTER) of three different densities, DD (double density, 720K), HD (high density, 1.44M) and ED (extra high density, 3.2M) in any mix. The disk interface connector is the same type that was fitted to the Trump Card so most QL compatible disk drives can be used.

Please note: that DD drives still give a capacity of 720K per diskette.  
Our DUAL ED DISK DRIVE allows the GOLD CARD to access DD,  
HD and ED diskettes.

Another feature is the battery backed clock. When the QL is switched on the contents of the clock are copied into the QL's clock so that the time and date are correct. The firmware in the ROM gives the GOLD CARD all the functionality of the Trump Card like TOOLKIT II and there is a sub-directory system for floppy and RAM disks.

Physically the GOLD CARD is about half the size of the TRUMP CARD and so fits almost all within the QL. Its current consumption is well under allowable maximum so no special power supply is required. The GOLD CARD comes with a 14 day money back guarantee and a 2 year warranty.

# "FOOD for THOUGHT"

*This is your chance to ask the tough questions many QL'ers have been pondering. Or maybe you can respond to a question and help us all. Whatever the case this is your column. It depends on your input. This column is intended to be a forum where legitimate questions and responses can be aired for the benefit of all. A response will accompany a question whenever possible.*



**Q:** With the influx of QL Hard Disks from many sources and the availability of cheap Tape Backup Drives that plug into floppy controllers (for that other computer), and the pain of backing up a hard disk to floppy disks, has anyone figured out what would be needed to hook up a Tape Backup Drive ?

**Q:** Six months ago I purchased the Level 2 drivers for my Trump Card. One of the goodies in this package is the ATR device which allows you to read MS-DOS disks. A couple of months ago I moved up to a Gold Card in which I am very pleased. But alas it doesn't contain the ATR device that I grew to love. My question is : can I get the ATR device for my Gold Card ?

**R:** *The drivers for the Gold Card were written by Tony Tebby for Miracle Systems, the Level 2 drivers including the ATR device were written by Jochen Hassler for Computer Technik/Jurgen Falkenberg (at least my version indicates this). My information would indicate that neither party were pursuing the application of the ATR device for use with the Gold Card at this time. - Bob Dyl*

**Q:** I've just received the latest version of QEM (3.7) and started making the rounds of bulletin boards. In doing so I realized I need a faster modem. Thats when the confusion set in. Fax modems have come way down in price, and the thought of being able to fax orders into my office using my trusty QL seemed to good to be true, and it was. I can't find fax/modem software for the QL anywhere. Is it available ?

**R:** *I've seen some fax/modem code in German that seemed to be incomplete. On the other hand, I understand that a prolific producer of PD software is evaluating C source code for fax/modems and the possibility of it being ported over to the QL. Watch this column for future developments. - Don Walterman*

**Q:** Recently, whenever I've picked up a QL publication or user group newsletter the hoopla surrounding the QXL card has been deafening while comment on the Graphics Card has dwindled to pure silence. I started computing in my late 60's and am now in my mid-seventies. I don't want to buy a PC, but an upgraded QL now that's something else. Will we ever see the rumoured IDE interface, the Graphics Card and the SCSI interface?

**R:** *We are still developing the Graphics Card and the SCSI interfaces. These are however taking longer than anticipated owing to the workload caused by the QXL. We have not forgotten you. In fact, we have some other exciting products planned but, would rather leave it at that, we don't want to prematurely raise your expectations as they were with the Graphics Card and SCSI interfaces. - Stuart Honeyball*

## FOOD for THOUGHT

Q: I purchased the SERMouse driver software soon after it was reviewed in IQLR, and an inexpensive three button serial mouse. My questions are: will a serial trackball work with this software, and what about the possibility of using a serial hand-held scanner with the QL ?

Q: I'm considering the purchase of a QXL card, I'm presently running with a Gold Card and Miracle's ED disk drives. My question is : Can I use the ED drives with the QXL card ?

R: *The present QXL drivers do not support ED floppy disk drives nor do most PC's. You can however purchase a special floppy disk controller that does support the ED format.* - Stuart Honyball

Q: My problem is, I'd like to generate an image of an alien disk. The image is stored in RAM1. How do I transfer the contents of RAM1 to a new disk ?

Q: At the Dayton, Ohio (USA) computer fest, I purchased the SERMouse software from Frank Davis of Mechanical Affinity. It works fine with "THE LONELY JOKER" software from Jochen Merz, but it's the only software I have that it will work with. What's wrong ?

R: *I would guess that the program you mentioned might be the ONLY Pointer compatible software you have. The Pointer Environment has rapidly grown in acceptance and most of the new software being released is Pointer compatible. I would suggest that you contact Frank at Mechanical Affinity, they carry a large selection of Pointer compatible software.*

*The following suppliers (who all have adverts in this issue) carry a wide variety of Pointer compatible software: Dilwyn Jones Computing, Jochen Merz Software, The Progs, QUBBESoft P/D, Ergon Development, Software87, Albin Hessler Software, and of course, Mechanical Affinity.* - Bob Dyl

Q: Although I've owned a QL for many years, I haven't used it until recently. My questions deal with communications. What software, hardware, cables etc. do I need to contact my local bulletin boards ? Where can I get the needed items ? Can I access CompuServe, and other major boards as well ?

Q: I'm constantly hearing about the Quanta Library as being a good source of PD software. How do I get at that software:

R: *To get access to the Quanta Library you must be a Quanta member, to join contact the membership secretary:*

*Bill Newell  
213 Manor Road  
Benfleet, Essex SS7 4JD  
Great Britain      Tel: 0268 754 407*



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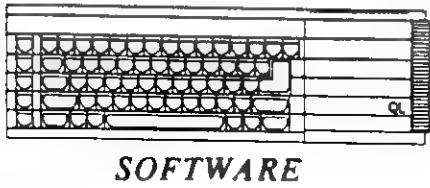
Contact: Jean Louis Dianoux  
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93230 Romainville  
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## **ORIGINAL PUBLIC DOMAIN**



## **WINDEX**

Cornish, New Hampshire, USA - Bill Cable

*WINDEX is a collection of Public Domain programs to create a 'Word Index' of any text file.*

While working on the instruction manual for my financial program, QLerk, I found I needed a way to index all the terms used. This group of programs are the result of my effort to create a word index with the QL. Although only a prototype, it seems to work well and provides a function that is not readily available to QL users : make a word index by line number or page number or page name. It can be used to index a manual or study word usage in a document or debug a program.

The process works like this :

- 1) Turn your document into a text (ASCII) file. In QUILL this is done by printing it to a file with the PRINTER\_DAT file not accessible (disk removed). SuperBASIC programs and ARCHIVE programs are already essentially text files.
- 2) Create an export file for importing to ARCHIVE out of the text file by running the SuperBASIC program TEXTOEXP\_BAS. This creates a file with the extension \_EXP.
- 3) Start up ARCHIVE and import the created export file by running the ARCHIVE program EXPTOARC\_PRG. This creates a database where each record has 2 fields (a line of text from the original text file and its line number) and the database has an extension \_ARC.
- 4) Create a word index by line from the ARC database by running the ARCHIVE program ARCTOLIN\_PRG. This creates a database where each record has 2 fields (a word that occurs in the \_ARC file and all line numbers where the word occurs) and this database has an extension \_LIN.
- 5) Now run VIEWLIN\_PRG to view (or print) the indexed words with the lines where they occur (from the LIN file) and also the actual lines where the word occurs (from the ARC file).
- 6) Finally you can run LINTOPAG\_PRG to define the page numbers from the line numbers (and optional page names) which creates a new database with this definition in it with extension \_PAG. Once the pages are defined you can print out a word index by page number or page name.

The entering of the WINDEX group of programs is described in the 6 steps listed below. When running them work in RAM if possible for speed. Have backups of important files. Many errors are not trapped (like wrong spellings of file names) and you will have to figure out the problem from the error message. A large text file will mean long running times and big database files.

### **STEPS FOR CREATING THE WINDEX PROGRAMS**

## WINDEX - (CONT'D)

STEP 1 : Entering TEXTOEXP\_BAS - A SuperBASIC program to make an ARCHIVE export file of any text file. Enter from QDOS using ED or EDIT commands. Run as a SuperBASIC program. Any non ASCII characters will be transformed. Quotes ("") must be temporarily transformed to a unique character.

```
1000 REMark          TEXTOEXP_BAS           Bill Cable 9/93
1010 :
1020 REMark If line length is more than 254 characters then they will be made
1030 REMark into 2 lines in the Export File.
1040 REMark Double Quotes must be converted to another character but can be
1050 REMark restored by the companion ARCHIVE program EXPTOARC_PRG
1060 REMark File channels #3 and #4 are opened and used for the files if the
1070 REMark program halts without closing files type - close #3 : close #4
1080 :
1090 WINDOW #1,512,206,0,0 : CLS
1100 PRINT "          TEXTOEXP_BAS"
1110 PRINT " A SuperBASIC program that is part of a sequence of programs used"
1120 PRINT " to make a word index of a text (ASCII) file. Designed to create an"
1130 PRINT " index of a multipage document or to be used to examine variables"
1140 PRINT " of a program. If necessary convert the file to a text file. PRINT"
1150 PRINT " a QUILL DOC file to a file with the PRINTER_DAT file not available"
1160 PRINT " (disk removed) to convert it to text. SuperBASIC and ARCHIVE_prg"
1170 PRINT " programs are basically text files. But if EOF is not detected when"
1180 PRINT " this program stops you must close channels #3 and #4. This program"
1185 PRINT " makes an export file (_exp) for ARCHIVE from the text file. Each"
1190 PRINT " text file line will become a single record. Next a series of"
1200 PRINT " ARCHIVE programs can be run to create the word index :"
1220 PRINT "EXPTOARC_PRG - imports export file as an ARCHIVE database (_arc)"
1230 PRINT " ARCTOLIN_PRG - Makes a line oriented word index database (_lin)"
1240 PRINT " LINTOPAG_PRG - Define page by line (_pag) and print page index"
1250 PRINT " VIEWLIN_PRG - View and print word index by line or lines"
1260 INPUT \" Press <ENTER> to continue : ";i$
1270 CLS : PRINT "          TEXTOEXP_BAS"
1280 INPUT \" Device where source text file is located : ";sd$
1290 INPUT " Name of source text file (include extension) : ";sn$
1300 INPUT \" Device to put ARCHIVE import file on : ";td$
1310 INPUT " Name to give ARCHIVE import for (without extension) : ";tn$
1320 LET tn$ = tn$&"_exp"
1330 INPUT \" Line Length [60-254, <ENTER>=80] : ";i$
1340 IF i$="" : LET i$="80" : END IF
1350 LET max_chr=i$ : IF max_chr<60 OR max_chr>254 : LET max_chr=80 : END IF
1360 INPUT " Change nonprintable characters to what [ <ENTER> = null ] : ";np$
1370 IF np$<>"" : LET np$=np$(1) : END IF
1380 INPUT ' Change double quote ("") to what [<ENTER> = ^] : ';dq$
1390 IF dq$<>"" : LET p$=dq$(1) : ELSE : LET dq$="" : END IF : CLS
1400 PRINT \"Converting text file to export file line by line" \\
1410 OPEN #3, sd$&sn$ : OPEN_NEW #4, td$&tn$ : PRINT #4,"ln","ln$"
1420 LET at_line = 0
1430 REPeat loop
1440 IF EOF(#3) : EXIT loop : END IF
```

## WINDEX - (CONT'D)

```
1450 INPUT #3,I$ : LET at_line = at_line + 1 : LET rp = 0
1460 PRINT #4,at_line;"";PRINT " ";at_line
1470 IF I$ = ""
1480   PRINT #4,""
1490 ELSE
1500   LET ln$=""
1510   FOR i = 1 TO LEN(I$)
1520     IF CODE(I$(i)) < 32 OR CODE(I$(i)) > 127
1530       LET ln$ = ln$ & np$
1540     ELSE
1550       IF I$(i) = ""
1560         LET ln$ = ln$ & dq$
1570       ELSE
1580         LET ln$ = ln$ & I$(i)
1590       END IF
1600     END IF
1610   END FOR i
1620   IF LEN(ln$) <= max_chr
1630     PRINT #4,ln$;"": PRINT ln$
1640   ELSE
1650     REPeat cutoff
1660     IF LEN(ln$) <= max_chr : EXIT cutoff : END IF
1670     LET i = max_chr
1680     REPeat space
1690     IF ln$(i) = " " : EXIT space : END IF
1700     LET i = i-1
1710     IF i = 0 : LET i = max_chr : EXIT space : END IF
1720     END REPeat space
1730     PRINT #4,ln$(1 TO i);"" : PRINT ln$(1 TO i)
1740     LET ln$ = ln$(i+1 TO LEN(ln$)) : LET rp = rp + .1
1750     PRINT #4,at_line + rp;"";PRINT at_line + rp
1760   END REPeat cutoff
1770   PRINT #4,ln$;"": PRINT ln$
1780 END IF
1790 END IF
1800 END REPeat loop
1810 CLOSE #3:CLOSE #4
1820 PRINT \" Export file ";td$;tn$;" made and files closed"
1830 PRINT \" From ARCHIVE run EXPTOARC_PRG to import the file to
ARCHIVE"
```

STEP 2 : Entering PRODS1\_PRG - A useful set of ARCHIVE procedures that should be merged into each of the programs that follow. Enter with the built-in ARCHIVE editor then save as "prods1". In each of the following Steps merge in this set of procedures to complete the program. To merge after typing in the lines of a program just type : merge "{}prods1" where {}=device then resave. Many of these procedures have been introduced in my previous IQLR and UPDATE articles.

```
proc acky;line,m$  
rem prints message (m$) at line & waits for acknowledge
```

## WINDEX - (CONT'D)

```
liny;line: print m$;".": tab 40;" Press <ENTER> : ";
input i$:liny;line
endproc
proc close_all
while 1: close : endwhile
endproc
proc defy;line,m$,d$
rem prompts m$ at line and suggests d$, \ = null
liny;line: print m$," [<ENTER> if ";"d$;""] : ";inp: if ans$="""
let ans$=d$: endif : if ans$="\": let ans$=""": endif
print at line,len(m$)+1;" ;";rv$;" ";ans$;" ";rv$; tab 80;
let ans$=lower(ans$)
endproc
proc heady;i$
rem clears screen and makes heading of i$
paper sp: cls : paper hp: ink hi
print rept(" ",240); at 1,1;i$;
paper sp: ink si: print at 4,0;
endproc
proc inp
rem inputs global variable ans$ in reverse screen color
print rv$; input ";"ans$;" "; print rv$;
endproc
proc inpy;line,m$
rem prompts m$ at line and inputs (through inp) ans$
liny;line: print m$+" : ";inp: let ans$=lower(ans$)
endproc
proc key_choice;i,i$,j$,k$,l$
rem prompts i$,j$,k$ at line i, accepts a single key input
rem if in l$ list, if ke=1 need enter if ke=0 don't
let ans$="": while not instr(l$,ans$) or len(ans$)<>1
print at i,0; tab 80; at i,0;i$,ke$j$;" => ";k$;" : ";rv$;" ";
if ke: input ans$; print ";"rv$; let ans$=lower(ans$)
else : let ans$=lower(getkey())
if code(ans$)<32: if code(ans$)=2: let ans$=""
else : if code(ans$)=3: let ans$=""
else : if code(ans$)=4: let ans$="": else : if code(ans$)=5
let ans$="": else : let ans$="": endif : endif : endif : endif
endif : print ans$;" ;rv$;: endif
if not instr(l$,ans$) or len(ans$)>1: if ke
let ans$=" then <ENTER>": else : let ans$="": endif
print at i,0;rv$; tab 80;
acky;i,"Press the SINGLE KEY for the desired action"+ans$
print rv$; endif : endwhile
endproc
proc liny;line
rem clears line at line
if line: print at line,0; tab 80;: print at line,1;: else : print : endif
endproc
proc msg;line,m$
rem prints pausing message m$ at line
```

## WINDEX - (CONT'D)

```
liny;line: print {" +m$ +"... }";
endproc
proc setup
rem sets needed initial values ** must be run first **
let rv$=chr(26): let hp=3: let hi=1: let sp=5: let si=1
let ke=1: let ke$=" KEY+ENTER ": let clw$=chr(27)+"B"
endproc
proc yorn;line,m$
rem prompts m$ at line returns y or n in ans$
let ans$="": while ans$<>"y" and ans$<>"n":liny;line
print m$+" [ y/n ] ":";inp: let ans$=lower(ans$): endwhile
endproc
```

STEP 3 : Entering EXPTOARC\_PRG - An ARCHIVE program to import the export file made by TEXTTOEXP BAS program. Enter with the built-in ARCHIVE editor then merge in the "prods1" procedures entered in Step 2 and then save as "exptoarc". To start first have an EXP file made with TEXTTOEXP and be in ARCHIVE and type : run "{}exptoarc"<ENTER> where {}=device. Quotes ("") can be restored.

```
proc exptoarc
mode 0:setup: error close all
heady;"EXPTOARC_PRG - Importing an export file to ARCHIVE for indexing"
defy;5,"Export file device","ram1 ": let sd$=ans$
inpy;6,"Export file name (leave off extension)": let sn$=ans$
yorn;8,"During import restore a character back to double quote (\"")
if ans$="y"
defy;9,"Charcter to convert to (\""),(^)": let c$=ans$
else : let c$="": endif
msg;11,"Importing export file as a database"
import sd$+sn$+" exp" as sd$+sn$+" arc" logical "d"
if len(c$)=1: let d$="":msg;11,"replacing "+c$+" with "+d$
find c$: while found(): let i=instr(ln$,c$): while i
if i=1: let i$=d$: else : let i$=ln$(1 to i-1)+d$: endif
if len(ln$)>i: let i$=i$+ln$(i+1 to len(ln$)) : endif
let ln$=i$: update : let i=instr(ln$,c$): endwhile : continue : endwhile : endif
msg;11,"ordering": order ln;a: close "d"
acky;11,"Import complete. Now run ARCTOLIN_PRG for index by line": mode 1
endproc
proc start
exptoarc
endproc
```

STEP 4 : Entering ARCTOLIN PRG - An ARCHIVE program to make a word index by line of the ARC file created by "exptoarc" (Part 3). Enter with the built-in ARCHIVE editor then merge in the "prods1" procedures entered in Step 2 and then save as "arctolin". To start first have an ARC file made with "exptoarc" and be in ARCHIVE and type : run "{}arctolin"<ENTER> where {}=device. It may take several hours or more to index large text files even with a Gold Card. The display can be suppressed if you want to multitask or you can run it late at night. The word breaks are the symbols that you want

## WINDEX - (CONT'D)

be used to separate words. The skip list is a list of words separated by '>' that need not be indexed. Common words that are not of interest. If the display is not suppressed the lines are displayed with skipped words in reverse colors.

```
proc arctolin
mode 0:setup: error close all:heady;"WORD INDEX BY LINE OF AN ARC FILE"
defy;5,"ARC file device","ram1 "; let sd$=ans$
inpy;6,"ARC file name (leave off extension)": let sn$=ans$
look sd$+sn$+" arc" logical "a"
heady;"MAKING WORD INDEX by LINE of "+sd$+sn$+"_arc"
create sd$+sn$+"_lin" logical "l"
word$
at_lines$
endcreate
order word$a
let wb$=". ,,:!@ # % ^ & *()-+ ~ f \ | [ { } ] < > / = """
print " Default word breaks : ";rv$;wb$;rv$:yorn;5,"Change word breaks"
if ans$="y":inpy;5,"New word breaks ": let wb$=ans$: endif
let sk$=">a>and>are>i>if>in>is>it>of>on>the>to>be>that>this>will>you>"
print at 7,1;"Default skip list : "; print " ";sk$
yorn;9,"Change (or remove) skip list": if ans$="y"
inpy;9,"": let sk$=ans$: endif
yorn;11,"Suppress printing progress (if multitasking)": let su$=ans$
if su$="y":msg;15,"slowly making word index by line"
else : cls : print "Printing Lines while indexing": print " l": endif
use "a": let ll=1: first : while not eof(): let ln$=lower(ln$)
let n=len(ln$): let i$="": while i$<=n
if instr(wb$,ln$(i)): if i$<>"":do_word: else : if su$="n": if ll<>ln
print : print num(ln,5): let ll=ln: endif : print ln$(i);: endif : endif
else : let i$=i$+ln$(i): endif : let i=i+1: endwhile
if i$<>"":do_word: endif : next : endwhile : error close_all
print : print : print " Word Index by Line in file "+sd$+sn$+" lin"+" completed"
print : print " Run VIEWLIN_PRG to view/print word index by line"
print " Run LINTOPAG_PRG to make word index by page"
acky;23,"Okay": mode 1
endproc
proc do_word
let n$=num(ln,5): use "l": locate i$
if len(i$)>=8: let j$=i$(1 to 8)
while instr(word$,j$) and i$<>word$ and not eof(): next : endwhile : endif
while i$=word$ and not eof()
next : endwhile : if i$<>word$: back : endif
if i$=word$ and len(at_lines$)>245
if not instr(at_lines$,n$): let word$="": endif : endif
if i$=word$: if not instr(at_lines$,n$)
let at_lines$=at_lines$+n$: update : endif
else : if instr(sk$,>+i$+>): let i$=rv$+i$+rv$
else : let word$=i$: let at_lines$=n$: append : endif : endif
if su$="n": if i<=len(a.ln$): let j$=a.ln$(i): else : let j$="": endif
if a.ln<>ll: print : print n$: endif : print i$;j$;: endif
let ll=a.ln: use "a": let i$=""
```

## WINDEX - (CONT'D)

```
endproc  
proc start  
arctolin  
endproc
```

STEP 5 : Entering VIEWLIN\_PRG - An ARCHIVE program to view and print the word index LIN file made by "arctolin" (Step 4). It will also allow viewing and printing the original text in the ARC file. Enter with the built-in ARCHIVE editor then merge in the "prods1" procedures entered in Step 2 and then save as "viewlin". To start first have the ARC and LIN files available and be in ARCHIVE and type : run "{}viewlin"<ENTER> where {}=device. First a word is displayed at the top with all lines where it occurred right below. Numbers are considered words. To inspect the line where a word occurs choose the line option ("l"). Details are limited here but play with the options to see what they do.

```
proc display_line  
let f$=""; use "a"  
while 1:lny;23: locate loc  
let loc=int(ln); print at 15,0;" Line ";loc; tab 80; at 17,0;ln$; tab 80;  
let k=recnum(); next : let m=17: while int(ln)=loc and not eof()  
let m=m+1: print at m,0;ln$; tab 80;; next : endwhile : position k  
let m=m+1: while m<22:lny,m: let m=m+1: endwhile  
key_choice;22," LINE OPTIONS","","Next Back Line Find More Done","nblfmd"  
if ans$="d": return  
else : if ans$="n": let loc=loc+1: else : if ans$="b": let loc=loc-1  
else : if ans$="l":inpy;23,"Display which Line": let loc=int(val(ans$))  
else : if ans$="f":inpy;23,"Find what": let f$=ans$  
if f$<>": find f$: let loc=int(ln): endif  
else : if ans$="m" and f$<>"": locate loc+1: back : continue : let loc=int(ln)  
endif : endif : endif : endif : endif  
endwhile  
endproc  
proc start  
viewlin  
endproc  
proc viewlin  
mode 0: error close all:setup: cls  
heady;"VIEWING WORDS INDEX by LINE": let wo$=" WORD OPTIONS"  
defy;7,"Device where lin and arc files are located","ram1_": let sd$=ans$  
inpy;8," File name (without extension)": let sn$=ans$; print  
print " looking at "+sd$+sn$+"_arc": look sd$+sn$+"_arc" logical "a"  
print " looking at "+sd$+sn$+"_lin": look sd$+sn$+"_lin" logical "l"  
cls : while 1: use "l": let i=recnum()  
print tab 25;"LINE INDEX of WORDS in ";sd$+sn$+"_lin"  
print at 1,1;word$: at 2,0;at_lines$: let j=2: let lw$=word$: next  
while word$=lw$ and not eof()  
while word$=lw$ and not eof() and j<9  
let j=j+3: print at j,0;at_lines$: next : endwhile  
if word$=lw$ and not eof()  
acky;23,"More to show": let j=-1: cls : print at 1,1;word$: endif : endwhile
```

## WINDEX - (CONT'D)

```
position i: let loc=int(val(at_lines$))
key_choice;22,wo$,"","Next Back Word Scroll Line Print Quit","nbwslpq"
if ans$="q": error close_all: mode 1: stop : endif
if ans$="n": next : while word$=lw$ and not eof(): next : endwhile : cls
else : if ans$="b": back : let lw$=word$: while word$=lw$ and recnum()<>0
back : endwhile : next : cls : else : if ans$="w":inpy;23,"Locate what word"
if ans$<>"": locate ans$: endif : cls
else : if ans$="s": let i=1
while i<21: if i=1: cls : print tab 30;"WORDS in ";sn$+" _lin": endif
print tab 5;word$: next : if eof(): first : endif
if i=20:key choice;22," SCROLL OPTIONS",""," Next Back Word Done","nbwd"
if ans$="d": let i=21: else : let i=1: if ans$="b": position recnum()-40
else : if ans$="w":inpy;23,"Word to start scroll at": locate ans$: endif
endif : endif
else : let i=i+1: endif : endwhile : locate lw$: cls
else : if ans$="l":display line: cls : else :view_print: spooloff : cls
endif : endif : endif : endif
endwhile
endproc
proc view_print
heady;"VIEW LINE PRINT OPTIONS": let lw$="": let pr$=" PRINT"
key_choice;4," Print to","","Screen Printer File Done","spfd"
if ans$="d": return : else : if ans$="s": spoolon screen : let so$="screen"
else : if ans$="p": let so$="printer"
else :inpy;5,"Output file name (leave off extension)"
let so$=sd$+ans$+" lis": spoolon so$ export : endif : endif : endif
key_choice;7,pr$,"Words only Index with words Lines Done","wild"
if ans$="d": return : endif : let pt$=ans$
if pt$="w" or pt$="i": use "l": first :defy;8,"Beginning Word",word$
let bg$=ans$: last :defy;9,"Ending word",word$: let ed$=ans$
if so$="screen": cls : else :msg;23,"Printing to "+so$: endif
lprint "PRINTOUT of WORDS in ";sd$;sn$," _lin": lprint
locate bg$: while word$<=ed$ and not eof()
if lw$<>word$: if pt$="i": lprint : endif : lprint word$: let lw$=word$: endif
if pt$="i": lprint at _lines$: endif
next : endwhile
else : use "a": first :defy;8,"Beginning line number",str(ln,2,0): let bg$=ans$
last :defy;9,"Ending line number",str(ln,2,0): let ed$=ans$
if so$="screen": cls : else :msg;23,"Printing to "+so$: endif
lprint "PRINTOUT of LINES of ";sd$;sn$," arc": lprint
locate val(bg$): let ed=int(val(ed$)): while ln<=ed and not eof()
lprint ln: lprint ln$: next : endwhile
endif
spooloff : if so$="screen": print : endif : acky;23,"Printing to "+so$+" done"
endproc
```

STEP 6 : Entering LINTOPAG\_PRG - An ARCHIVE program to define page numbers and page names by line numbers and then output a word index by page number or page name. Enter with the built-in ARCHIVE editor then merge in the "prods1" procedures entered in Step 2 and then save as "lintopag". To start first have the ARC and LIN files

## WINDEX - (CONT'D)

available and be in ARCHIVE and type : run "{}lintopag"<ENTER> where {}=device. Outputting to a file will allow the page index to be brought into a word processor for final editing.

```
proc indexer
cls :print tab 15;"PRINTING WORD INDEX by PAGE/NAME from "+sd$+sn$+"_lin"
key_choice;5," Print Index by",""," Page Name eXit","pxn"
if ans$="x": return :endif
if ans$="p": let pb$="PAGE": let cb=15: else : let pb$="NAME": let cb=7: endif
key_choice;7," Print Index to",""," Screen Printer File eXit","spfx"
if ans$="x": return :else : if ans$="s": let po$="screen": spoolon screen
else : if ans$="f": let po$=sd$+sn$+" "+lower(pb$(1))+".ix"
spoolon po$ export : else : let po$="printer": endif : endif : endif
look sd$+sn$+"_lin" logical "l"
look sd$+sn$+"_pag" logical "p"
use "l": let ll=0: let lp=0: let lw$="": let bg=1: let n=len(at_lines$)
let cnt=0: let lnm$=""
if po$="screen": cls : else :msg;23,"printing index to "+po$: endif
lprint tab 25;pb$;" INDEX of ";sd$;sn$;"_lin"
lprint tab 65;date(1): lprint : lprint
while not eof(): if bg<n: let m=val(at_lines$(bg to bg+4))
use "p": locate m: let pg=ppage: let pn$=pname$
if lw$<>l.word$: lprint : lprint : lprint l.word$: lprint " ";
let cnt=0: let lw$=l.word$: let lp=0: let lnm$="": endif
if (pb$="PAGE" and pg<>lp) or (pb$="NAME" and lnm$<>pn$)
if cnt>0: lprint ",": endif
if pb$="PAGE": lprint pg: else : lprint pn$: endif
let lp=pg: let lnm$=pn$: let cnt=cnt+1: if cnt=cb: lprint ",": lprint tab 5;
let cnt=0: endif : endif
let bg=bg+5: use "l"
else : use "l": let bg=1: next : let n=len(at_lines$): endif : endwhile
spooloff
if po$="screen": print : print : endif
acky;23,"Printing index to "+po$+" completed"
endproc

proc lintopag
mode 0:setup: error close all:heady;"WORD INDEX BY PAGE"
defy;5,"LIN file device","ram1": let sd$=ans$
inpy;6,"LIN file name (leave off extension)": let sn$=ans$
let w$=" Which ": while 1: error close all: spooloff
heady;"WORD INDEX BY PAGE OF "+upper(sd$+sn$+"_lin")
key_choice;8,w$,"Define pages Inspect definition Print index Quit","dipq"
if ans$="q": error close all: mode 1: stop : else : if ans$="d":page_define
else : if ans$="i":page_inspect: else :indexer: endif : endif : endwhile
endproc

proc make_def
msg;6,"making page definition file"
create sd$+sn$+"_pag" logical "p"
pline
ppage
pname$
```

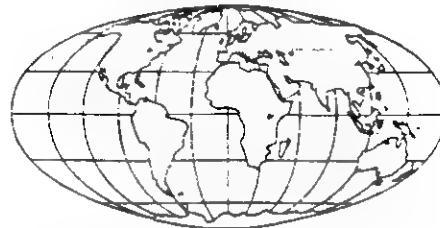
## WINDEX - (CONT'D)

```
endcreate : order pline;a
endproc
proc page_define
heady;"DEFINE PAGES": let fnd$="page": let lfnd$="": let lpname$=""
error make_def: if errnum() and errnum()<>21:acky;7,"Err = "+str(errnum(),2,0)
mode 0: stop : endif
if errnum()=21:yorn;7,"Page definition file already exists. Delete it"
if ans$="y": kill sd$+sn$+"_pag": cls :page_define: return
else : mode 1: error close_all: stop : endif : endif
look sd$+sn$+"_arc" logical "a"
defy;9,"Starting page number","1": let pg=int(val(ans$))
use "a": while 1: print at 3,0;clw$;
print tab 30;"DEFINING PAGE ";pg
key_choice;5,"Find page line by","", Line # Text Done","ltd"
if ans$="d": return : endif : let def$=ans$: if def$="l"
inpy;6,"Line number": let lnum=int(val(ans$)): locate lnum
else :defy;6,"Text to use to locate page",fnd$: let fnd$=ans$
if fnd$=lfnd$: continue : else : find fnd$: let lfnd$=fnd$: endif
let lnum=ln: endif
let ans$"": let ch$=" Here Back Next Continue Retry"
while ans$<>"r": print at 9,1;clw$;"Line ";ln;" ": print ln$
key_choice;20,"Page "+str(pg,2,0)+" Ends","",ch$,"hbncr"
if ans$="h": use "p":defy;21,"Page name (if any)",lpname$: let pname$=ans$
let ppage=pg: let pg=pg+1: let pline=a.ln: append : use "a": let ans$="r"
else : if ans$="b": back : else : if ans$="n": next
else : continue : endif : endif : endif
endwhile : endwhile
endproc
proc page_inspect
heady;"Inspecting Page Definition in file "+sd$+sn$+"_pag"
look sd$+sn$+"_pag"
yorn;5,"Display to screen instead of printer"
if ans$="y": spoolon screen : cls : else :msg;10,"Printing now": endif
lprint "Page definition in ";sd$+sn$;"_pag"
lprint : lprint "Page"; tab 10;"Begin Line"; tab 25;"End Line"; tab 40;"Name"
let bg=1: while not eof()
lprint " ";ppage; tab 12;bg; tab 27;pline; tab 40;pname$
let bg=pline+1: next : endwhile : spooloff : print
acky;23,"Done displaying page definition"
endproc
proc start
lntopag
endproc
```

(Editor's Note: Bill has kindly provided IQLR with "WINDEX" on a disk. If you'd like a copy, send us a FORMATTED 3.5" disk along with return postage. Note our address on page two of this issue.)

# INTERNATIONAL QL NEWS

*This column is designed to bring together new and/or changing developments within the QL community. The information contained here has been reported to us by individuals and/or suppliers who desire to keep you informed as to their recent activities.*



## SOFTWARE87 - London, Great Britain

Recently announced the release of the latest version of 'Text87 plus4'. Version 4 of plus4 features many enhancements over previous releases. In addition the user interface of the program has been improved in several important areas, allowing for easier user access to its capabilities. Only three files have been updated: TEXT87 plus4, the main program, plus4setup, the setup program, and HELP\_T91 the help file. Files containing sample macro definitions have also been added.

## ERGON DEVELOPMENT - Reggio Emilia, Italy

Have added tutorials to all their software offerings as part of their program to make life easier for end users. ERGON has also dropped the bank fees for payment in currency other than Italian Lira and reduced P&P rates for airmail delivery outside Europe.

## DILWYN JONES COMPUTING - Bangor, Gwynedd, Great Britain

Have recently expanded their hugh line of affordable software to include Deltasoft's 'FLIGHTDECK' a real time flight simulator program based on a Boeing 737, also offered is a companion program 'AMD AIRPLAN' a serious flight planning prgram for use by private and/or commercial pilots. A third program titled 'IMAGE-D' is a 3D graphics design program that allows you to produce graphical representations of three-dimensional objects and to view them in a varity of ways.

The long awaited PAGE DESIGNER 3 was launched at the Bristol Quanta Workshop held on the 17th of October. PD3 is pointer driven and can be controlled by mouse or keyboard and features text import, full QL screen handling, graphics menu, cut and paste, with printer drivers supporting most printers including the HP Deskjet.

## MECHANICAL AFFINITY - Peru, Indiana, USA

Frank Davis of Mechanical Affinity reports that they have recently purchased a large stock of used but not abused Sinclair Vision QL Monitors, Magnavox (Phillips in Europe) Monitors, 512K Expanderams, and 896K Trump Cards. For more information contact Frank at : 317 473 8031

## MIRACLE SYSTEMS LTD - Osbaldwick, York, Great Britain

Miracle Systems announces the arrival of Benjamin Wykes to their staff. Benjamin is a student who will work on the SCSI interface as part of the practical application of his continuing studies.

## INTERNATIONAL QL NEWS - (CONT'D)

### QUBBEsoft P/D - Rayne, Braintree, Essex, Great Britain

Ron Dunnett of QUBBEsoft P/D has reported production has begun on FAST-NET, a completely new Network for the QL and emulated ST's. The hardware consists of a cased printed circuit board that simply plugs into the ROM slot of each QL or ST on the Network via a small ribbon cable. Software for the QL is on ROM and is available on power up.

Why a new Network ? The QL Network runs at approximately 2 Kbytes per second, while FAST-NET runs at 20 Kbytes per second (10 times faster). If you EXEC'ed Quill over the standard QL Network, it would take 30 seconds to appear, using FAST-NET the time is reduced to 3 seconds. The price for FAST-NET is £120 p&p and consists of two cased circuit boards plus the ribbon cable (the minimum requirements for a Network).

For a copy of our latest catalogue, containing information on all our PD and Shareware software, new QL hardware, and second user QL hardware and software please note our advert in this issue.

### ALBIN HESSLER SOFTWARE - Aichtal, Germany

Available in December, the program QDOS users have been waiting for "CueShell" the ultimate pointer driven desktop program (front end) for all QDOS compatible systems.

CueShell is intended to be an easy to use desktop program (front end) which offers all the standard needs. A single application program, it only needs the pointer environment to be installed. Memory expansion is required and a mouse is recommended.

Configuration is made from within the program by saving the actual stages. CueShell is extremely size variable, the main window size can vary between just the headline menu to any size up to the physical screen size of your computer. Thus, up to 6 catalogue windows can be seen and worked on a standard QL screen.

CueShell can be used alone for file management, or transiently for filename selection from any program. The latter occurs by calling CueShell with a special hotkey which saves the last active queue, QueShell can then be used for all operations, or it can be left to return to the calling job and stuffing a selected filename into that queue.

CueShell will cost about DM100. As is the case with all my software, CueShell will continue to develop and we are always thankful for any hints you might have. Updates are FREE except for postage costs, which can be covered by International reply Coupons (IRC's). Please note our advert in this issue for a sample screen shot.

### QUANTA LIBRARY UPDATE

W. Geraint Jones, Quanta's new "Head Librarian" has recently issued DEMO\_6, the latest addition to the Quanta library. IQLR will publish a complete library listing in our next issue.

# plus4 publisher

We are pleased to announce an important development on the QL software scene. Thanks to plus4, QL users have been able to produce high quality text output matching that of the most expensive PC wordprocessors. However, until now, no QL program has been able to produce drawings and headline text of similar quality.

**plus4 publisher** is a new modular system comprising the **plus4** wordprocessor, **LINEDesign**, and **publisher's pack**.

The new page design program **LINEDesign** allows the creation of A4 pages consisting of scalable drawings and text. Extensive commands for accurate drawing using lines, rectangles, poly-lines, ellipses, and bezier curves are provided. You can apply gray shades, fill patterns and outlining to surfaces. Once you have drawn an object, you can move it around the page, enlarge or reduce it, expand or squash it, rotate or transform it *without losing any detail and without affecting other objects on the page*. In addition, **LINEDesign** can do the same with text, combining any of the 57 scalable founts supplied with the program. These are not bit-mapped founts as used by other QL programs. Each fount can be printed in any size from smallprint to huge headline (even 4 inches tall) without jagged edges or loss of quality. Text can be rotated to any angle, shaded, slanted, even distorted for special effects. **LINEDesign** is supplied on *Eleven* disks which contain the program, the founts and a large number of ready-made scalable drawings for inclusion in your publications.

**publisher's pack** contains the component programs which combine the text editing and printing capabilities of **plus4** with the graphic and fount handling power of **LINEDesign**. In addition **publisher's pack** includes two extra items: **fountext93**, a new high resolution upgrade to **fountext88** which prints at 180 x 180 dots per inch on 24-pin and bubblejet printers and the new **plus4** version 3.9 with many enhancements. Step-by-step instructions in the manual together with sample documents and ready-made page-layout objects such as shadowed boxes provide all you need to start preparing your own professional looking publications.

A Gold Card or Atari with QL Emulator is highly recommended for this system.

We also supply other exciting programs that are the best in their category. Programs such as the new spreadsheet, **QSpread**, the new database manager, **DATAdesign**, or the well established system manager, **Qpac II** which run under the Pointer Environment.

plus4 and plus4 publisher software	
plus4 publisher (plus4 + LINEDesign + publisher's pack)	£199
please enquire about special upgrade prices to plus4 publisher if you currently use plus4, text87 or LINEDesign	
LINEDesign	£99
plus4 wordprocessor	£79
fountext88 + founted89 (graphic driver and founts for plus4)	£39
2488 (drivers for plus4 for 24-pin and bubblejet printers)	£19
typeset90-deskjet (plus4 drivers for HP Deskjets and lasers)	£19

other software	
DATAdesign v. 3	£59
DATAdesign API	£19
QD version 5	£55
QSpread	£69
QDesign II	£69
Qpac II	£39
FiFi	£19
QTop	£29

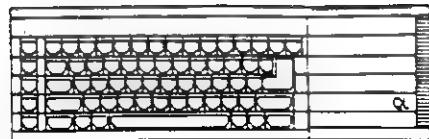
You can pay by: cheque (UK banks), Traveller's Cheques, Postal Orders, Eurocheques (all in Pounds Sterling).

**Software 87, 33 Savernake Road, London NW3 2JU**  
For all enquiries ring 071 485 9008 Monday to Friday 2pm-5pm

# THE STRIPPER

Bangor, Gwynedd, GREAT BRITAIN - Dilwyn Jones

ORIGINAL PUBLIC DOMAIN



SOFTWARE

No, this is a program to strip out control codes from a Quill\_DOC file leaving it with no end of line characters between paragraphs, turning it into a TRUE plain text file.

This article shows you how to extract text from a Quill\_DOC file and teaches you the meaning of some of the control codes you are likely to encounter in these files.

At the beginning of the program, there is a list of variables. These interpret how the various typefaces and other controls in a \_DOC file are converted. If they are specified as empty strings, e.g.

LET formfeed\$ = ""

they are simply omitted from the destination file. You can include your own codes for the target application here, e.g.

LET formfeed\$ = CHR\$(12)

```
100 REMark ****
110 REMark Convert Quill_DOC to TRUE plain text files
120 REMark      Needs Toolkit 2 to work
130 REMark      written by Dilwyn Jones 1993
140 REMark ****
150 :
160 REMark how to send the Quill text attributes, change as required
170 paragraph$ = CHR$(13) & CHR$(10) : REMark end of line / paragraph
180 tab$ = CHR$(9) : REMark how TAB is to be treated
190 underline_on$ = "": REMark ignore underline
200 underline_off$ = "": REMark ignore underline
210 bold_on$ = "": REMark ignore bold
220 bold_off$ = "": REMark ignore bold
230 high_on$ = "": REMark ignore superscript
240 high_off$ = "": REMark ignore superscript
250 low_on$ = "": REMark ignore subscript
260 low_off$ = "": REMark ignore subscript
270 formfeed$ = "": REMark ignore page breaks
280 hyphen$ = "": REMark what to do with soft hyphens
290 include_header = 0 : REMark put it as first paragraph of text
300 include_footer = 0 : REMark put it as second paragraph of text
310 :
320 WINDOW #0,452,42,30,214 : REMark like TV mode
330 BORDER #0,1,255 : CLS #0 : AT #0,1,0
340 INPUT #0,'Enter name of Quill_DOC file:';f$
350 INPUT #0,'Enter name of output file:';output$
360 OPEN IN #3,f$
370 file_length = FLEN(#3)
380 :
390 REMark search for Quill file preamble identifier
```

## THE STRIPPER - (CONT'D)

```
400 REMark check for 'vrm1qdf0' at file position 3 to 20
410 BGET #3\2
420 k$ = " : REMark identify Quill file preamble
430 FOR a = 1 TO 8 : k$ = k$ & INKEY$(#3)
440 IF k$ <> 'vrm1qdf0' THEN CLOSE #3 : STOP : REMark OOPS!
450 :
460 REMark check length of text part, get long word (4 bytes)
470 BGET #3\10
480 k1 = CODE(INKEY$(#3))
490 k2 = CODE(INKEY$(#3))
500 k3 = CODE(INKEY$(#3))
510 k4 = CODE(INKEY$(#3))
520 quill_length = (256*256*256*k1) + (256*256*k2) + (256*k3) + k4
530 end_pos = quill_length
540 :
550 REMark fetch page header first, then page footers
560 BGET #3\20 : REMark header starts here
570 header$ = " : footer$ = "
580 REPeat loop
590 IF EOF(#3) : EXIT loop
600 k$ = INKEY$(#3)
610 IF k$ = CHR$(0) : EXIT loop
620 header$ = header$ & k$
630 END REPeat loop
640 REPeat loop
650 IF EOF(#3) : EXIT loop
660 k$ = INKEY$(#3)
670 IF k$ = CHR$(0) : EXIT loop
680 footer$ = footer$ & k$
690 END REPeat loop
700 :
710 REMark text starts just after header&footer
720 start_pos = FPOS(#3)
730 IF EOF(#3) THEN
740 REMark adjust if no header & footer
750 BGET #3\20
760 start_pos = 20
770 END IF
780 :
790 REMark ready to start reading file
800 :
810 REMark current settings of typefaces
820 bold% = 0 : underline% = 0 : high% = 0 : low% = 0
830 :
840 OPEN_NEW #4,output$
850 IF include_header = 1 : PRINT #4,header$;paragraph$;
860 IF include_footer = 1 : PRINT #4,footer$;paragraph$;
870 :
880 size = end_pos - start_pos : REMark file size
890 x = 0 : REMark how many bytes have we done
```

## THE STRIPPER - (CONT'D)

```
900 BLOCK #0,444,6,0,2,2 : REMark 'to do and done' indicator
910 OVER #0,-1 : REMark for plotting indicator
920 FOR a = start_pos TO end_pos
930 BLOCK #0,1,6,444*(x/size),2,4 : REMark indicator
940 key = CODE(INKEY$(#3))
950 SElect ON key
960   =0 : PRINT #4,paragraph$;
970   =9 : PRINT #4,tab$;
980   =12 : PRINT #4,formfeed$;
990   =15 : REMark Bold toggle
1000     IF bold% = 1 THEN
1010       PRINT #4,bold_on$;
1020     ELSE
1030       PRINT #4,bold_off$;
1040     END IF
1050     bold% = NOT bold%
1060   =16 : REMark Underline toggle
1070     IF underline% = 1 THEN
1080       PRINT #4,underline_on$;
1090     ELSE
1100       PRINT #4,underline_off$;
1110     END IF
1120     underline% = NOT underline%
1130   =17 : REMark low (subscript) toggle
1140     IF low% = 1 THEN
1150       PRINT #4,low_on$;
1160     ELSE
1170       PRINT #4,low_off$;
1180     END IF
1190     low% = NOT low%
1200   =18 : REMark high (superscript) toggle
1210     IF high% = 1 THEN
1220       PRINT #4,high_on$;
1230     ELSE
1240       PRINT #4,high_off$;
1250     END IF
1260     high% = NOT high%
1270   =30 : REMark hyphen
1280     PRINT #4,hyphen$;
1290   =REMAINDER : REMark others are text or non-standard controls
1300     IF key > 31 THEN PRINT #4,CHR$(key);
1310 END SElect
1320 BLOCK #0,1,6,444*(x/size),2,4 : REMark indicator
1330 x = x + 1
1340 END FOR a
1350 OVER #0,0 : CLOSE #3 : CLOSE #4
1360 AT #0,3,0 : CLS #0,3 : PRINT #0,'PROGRAM FINISHED.';
```

If you set the program to include the header and footer, they will be copied into the target file as the first two paragraphs. You can either use this as a guide for what to type as header and footer in the target program, or they could be made into header and footer sections for Text 87, for example.

## THE STRIPPER - (CONT'D)

You will be asked to enter the original file's name, and a target filename. Both should include the drive references, unless you are using the Toolkit 2 default drives. If the destination file already exists, the Toolkit 2 prompt will come up asking if you wish to overwrite.

The program is not error protected! I wrote this for my own use only and if you want error trapping, you must add this yourself. It also helped me to keep the program short for publication.

As it copies the file, a red bar is shown along the top. This represents the source file. A moving white line shows how far the program has got as an indication of progress. Due to slaving, it should be viewed as progress in the source file, the destination may lag a bit behind.

This little program is useful in its own right, but is also useful for studying the structure of a Quill \_DOC file and how to access the text area and interpret the sub-32 character codes. Those I know of include:

- 0 - linefeed or end of paragraph
- 9 - tab character
- 12 - form feed character (page break)
- 14 - end of text
- 15 - bold on/off toggle (first occurrence=on, second=off, etc)
- 16 - underline on/off toggle
- 17 - low script toggle (subscript)
- 18 - high script toggle (superscript)
- 30 - hyphen marker

The first two 'paragraphs' in the file (starting at file position 20, actually pointed to by the first word in the file, but always 20 as far as I know) are the header and footer respectively. These may be absent if no footer or header has been specified. Here is the 'preamble' format for the first 20 bytes of a Quill \_DOC file:

0	word	header length
2	8 bytes	"vrmlqdf0" preamble used to identify file
10	long word	Length of text area
14	word	length of paragraph table
16	word	length of free space table
18	word	length of layout table

The latter three entries are not used by Stripper. I am grateful to Dave Walker for this information, without which I could not have written this program, or it would have taken me longer to write it at the very least! Further details on the file format are given in Dave Walker's Textidy program, in a file called Textidy\_REF.

Note - if you are using this program to extract text from a Quill file for transfer to another computer, for example, remember two things. The line lengths will be quite long since each paragraph is treated as a single long line. The order of carriage return and linefeed is important for some computers, you may have to swap the CHR\$(10) and CHR\$(13) in line 170.

## THE STRIPPER - (CONT'D)

This program is quite slow and patience is required for long files. Phil Borman wrote a conversion of this program into C, which is quite a bit faster. It is reproduced here with his permission.

```
/*
```

```
Simple program to create _txt files from _doc format  
Converted to 'C' from Dilwyn's basic as a 'C' programming  
exercise by PA Borman, Aug 93
```

```
It's not a full conversion as Dilwn's basic prints a status  
bar so you can see how far it's got. This doesn't bother as  
it's so fast converting files, there is no need.
```

```
*/
```

```
#include <stdio.h>  
#include <stdlib.h>  
#include <string.h>  
#include <qdos.h>  
  
void consetup_title();  
void (*consetup)() = consetup_title; /* use title window */  
void (*cmdparams)() = NULL; /* no parameter passing */  
long (*cmdchannels)() = NULL; /* no redirection */  
char* _endmsg = NULL; /* stop when I say */  
  
char _prog_name[] = "Stripper";  
char _version[] = "1.00";  
char _copyright[] = "PA Borman, Aug 93";  
  
char formfeed[] = "\f"; /* change these strings to suit */  
char boldon[] = "\b";  
char boldoff[] = "\b";  
char highon[] = "\b";  
char highoff[] = "\b";  
char ulineon[] = "\b";  
char ulineoff[] = "\b";  
char lowon[] = "\b";  
char lowoff[] = "\b";  
char hyphen[] = "\b";  
  
char paragraph[] = " "; /* need to allow space for patching codes */  
char tab[] = "\t"; /* in on both these buffers as non-ascii */  
  
int sleep(int); /* forward declare some functions */  
void read_error(void);  
long getline(char *s, long n, FILE *iop); /* custom read functions */  
long getbuff(char *s, long n, FILE *iop);  
  
void main()
```

## THE STRIPPER - (CONT'D)

```
{  
char filename[32],      /* define a few buffers for strings */  
      output[32],    /* these are max 32 char device names */  
      header[120],   /* and head/foot can't exceed 120 */  
      footer[120],  
      buffer[64];    /* this is to read bits of file into */  
  
FILE *fp, *op;          /* some file pointers for in/out */  
  
int err,                /* general error return */  
ch,                     /* single character read */  
include_header = 0,     /* flags to control output */  
include_footer = 0,  
bold = 0,  
underline = 0,  
low = 0,  
high = 0;  
  
long fsize,              /* file size (surprise surprise) */  
txtlen,                 /* general string length variable */  
endpos,                 /* end of text file position */  
curpos,                 /* current file position */  
f;                      /* FOR loop counter */  
  
sprintf(paragraph, "%c %c", 13, 10); /* define end of paragraph = CR/LF */  
sprintf(tab, "%c", 9);           /* and tab character = 9 */  
  
printf("Enter name of Quill _DOC file: ");  
scanf("%s\n",filename);  
printf("Enter name of output file: ");  
scanf("%s\n",output);  
fp = fopen(filename,"r");  
if (fp == NULL)  
{  
    printf("Cannot open %s\n",filename);  
    sleep(4);  
    exit(-1);  
}  
/* read file header into buffer */  
err = fs_headr(fgetchid(fp), -1, buffer, 64);  
if (err <= 0)  
{  
    printf("Error reading file header (%d)\n",err);  
    sleep(4);  
    exit(err);  
}  
  
/* WOW! a complex cast expression to get file length from the header */  
fsize = *((long *)buffer);
```

## THE STRIPPER - (CONT'D)

```
/* read and discard the first two bytes from the file */
err = fgetc(fp);
err = fgetc(fp);
/* fetch 8 bytes from the file to a buffer allowing room for terminator */
txtlen = getbuff(buffer, 9, fp); /* custom function returns 0 on error */
if (txtlen == 0)
    read_error;
/* see if it is the right header */
err = strcmp(buffer, "vrm1qdf0"); /* returns zero if strings match */
if (err != 0)
{
    printf("%s is not a Quill_doc\n",filename);
    sleep(4);
    exit(-1);
}

/* read the length of the text part (next longword from file) */
txtlen = getbuff(buffer, 5, fp); /* allow terminator space again */
if (txtlen == 0)
    read_error;
endpos = *((long *)buffer); /* wow! another complex cast */

/* now skip 6 characters to position on start of header */
for (f = 0; f < 6; err = fgetc(fp), f++);
currpos = 20; /* this is where we are now */

/* now read the document header and footer lines */
txtlen = getline(header, 120, fp);
if (txtlen == 0)
    read_error;
currpos = currpos + txtlen; /* update file position monitor */

txtlen = getline(footer, 120, fp);
if (txtlen == 0)
    read_error;
currpos = currpos + txtlen; /* update file position monitor */

/* open the output file */
op = fopen(output,"w");
if (op == NULL)
{
    printf("Cannot open %s\n",output);
    sleep(4);
    exit(-1);
}

/* print header and footer lines */
if (include_header == 1)
{
    fprintf(op, header);
```

## THE STRIPPER - (CONT'D)

```
    fprintf(op, paragraph);
}
if (include_footer == 1)
{
    fprintf(op, footer);
    fprintf(op, paragraph);
}

for (f = currpos; f < endpos; f++) /* for all the text bit.... */
{
    ch = fgetc(fp);           /* fetch a char */
    switch(ch)
    {
        case(0):
            fprintf(op,paragraph);      /* new paragraph */
            break;
        case(9):
            fprintf(op,tab);          /* tab */
            break;
        case(12):
            fprintf(op,formfeed);     /* form feed */
            break;
        case(15):                  /* bold toggle */
            if (bold == 1)
            {
                fprintf(op,boldon);
                bold = 0;
            }
            else
            {
                fprintf(op,boldoff);
                bold = 1;
            }
            break;
        case(16):                  /* underline toggle */
            if (uline == 1)
            {
                fprintf(op,ulineon);
                uline = 0;
            }
            else
            {
                fprintf(op,ulineoff);
                uline = 1;
            }
            break;
        case(17):                  /* subscript toggle */
            if (low == 1)
            {
                fprintf(op,lowon);
```

## THE STRIPPER - (CONT'D)

```
    low = 0;
}
else
{
    fprintf(op,lowoff);
    low = 1;
}
break;
case(18):           /* superscript toggle */
if (high == 1)
{
    fprintf(op,highon);
    high = 0;
}
else
{
    fprintf(op,highoff);
    high = 1;
}
break;
case(30):           /* hyphen */
fprintf(op,hyphen);
break;
default:
if (ch > 31)          /* anything else is a letter */
    fputc(ch, op);      /* or garbage if <= space */
}
}

printf("PROGRAM FINISHED.\n");
sleep(2);             /* short pause before quitting */

}

void read_error(void)
{
printf("Error reading file\n");
sleep(4);
exit(-1);
}

long  getline(char *s, long n, FILE *iop)
{
/* fetch at most n characters from iop or up to first '\0'
   returning the number of characters read (including '\0')
   or return 0 if buffer full before '\0' found. */
int c, f;

for(f = 0; f < n-1 && (c = getc(iop)) != EOF && c != '\0'; f++)
    s[f] = c;
s[f+1] = '\0';
}
```

## THE STRIPPER - (CONT'D)

```
if (c == '\0')
    return f;
else
    return 0;
}
long getbuff(char *s, long n, FILE *iop)
{
/* fetch at most n characters from iop or until EOF
   returning the number of characters read. */
int c, f;

for(f = 0; f < n-1 && (c = getc(iop)) != EOF; f++)
    s[f] = c;
s[f+1] = '\0';
return f;
}
```

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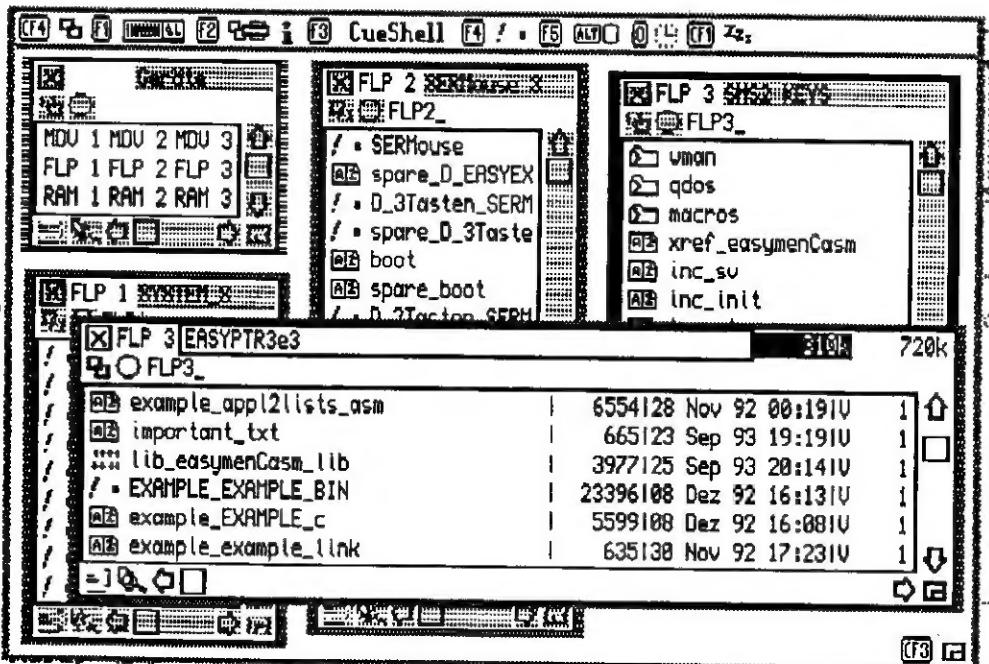
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